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WILLIS L. MOORE, Chief U. S. Weather Bureau.

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CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 1, NORTH ATLANTIC STATES.

WILFORD M. WILSON, District Editor.

GENERAL SUMMARY.

The weather of April, 1912, was very unfavorable in all parts of the North Atlantic States, although in the principal agricultural sections it was warmer than usual and the rainfall was close to the normal amount. Over much of the northern part of the district the weather remained comparatively cool throughout the month, with an excess of precipitation and an exceptionally large number of rainy days. These conditions made the month so unsuited to the ordinary operations of the season that spring farm work was greatly delayed. Equal difficulty was experienced in the southern States of the district, where the heavy precipitation of March and the lack of drying weather in April kept the ground unusually wet, while frequent reversions to lower temperatures made the month quite disagreeable, hindered agricultural operations, and prevented the normal progress of vegetation.

In all parts of the district the month was remarkable for the frequency of the storms, some of which were of unusual character, particularly the heavy snow storm that passed over New York on the 2d and 3d and the destructive local storms that occurred on the afternoon of the 2d in the vicinities of Philadelphia, Pa., Camden, and other places in New Jersey.

The following table exhibits the leading features of meteorological interest for the several sections of the district:

States, or parts of States within District No. 1.	Temperature.				Precipitation.				Average number of—	
	Average.	Departure.	Highest.	Lowest.	Average.	Departure.	Greatest total.	Least total.	Rainy days.	Clear days.
New England	44.0	+0.3	81	5	3.51	+0.62	5.11	0.71	14	10
New York	44.6	−0.3	84	5	4.19	+1.23	7.41	2.80	15	10
Pennsylvania	50.0	+2.1	83	18	4.32	+1.07	7.31	2.41	15	9
New Jersey	50.4	+1.3	82	18	3.56	+0.08	6.02	1.81	14	9
Maryland, Delaware, and District of Columbia	55.0	+2.8	87	23	3.63	−0.57	4.03	1.31	11	12
West Virginia	54.0	+4.0	87	21	1.89	−0.93	3.21	1.09	8	8
Virginia	56.3	+3.0	86	24	2.57	−0.88	4.18	1.64	9	10

TEMPERATURE.

For the district as a whole the average temperature differed but little from the normal, but as compared with the conditions usually experienced in April there was a wide variance in the prevailing weather in different parts of the district. The temperature averaged more than 2° lower than usual over extensive areas in New York and New England, while in the southern part of the district the month was considerably warmer than usual. In parts of Pennsylvania, Maryland, and West Virginia, near the western border of the district, the temperatures averaged 4° to 6° higher than the April normals, and the means approached the highest on record. Temperatures averaged more than 24° higher in the warmest than in the coldest parts of the district, as shown by the highest and lowest mean temperatures reported for the month, which were 59.4° at Eastville, Va., and 35° at Greenville, Me. Notwithstanding the prevalence of temperatures above the normal in the southern sections, the month in nearly all parts of the district was regarded as a cool and unfavorable one, owing to the unusually small number of pleasant sunny days, the very frequent rains, and the regular occurrence of a change to colder after two or three days of mild weather. Moreover, the second half of the month was so little warmer than the first that the season advanced much more slowly than usual.

Moderate temperatures prevailed at the beginning of the month, but by the 4th the weather had become very cold, and the lowest temperatures of the month occurred at most stations on that date. Temperatures were unseasonably low again, with freezing weather occurring extensively, on the 8th, 9th, 17th, 20th, and 24th. A temperature of 30° was observed as far south as Woodstock, Va., on the 24th. The highest temperatures of the month occurred chiefly on the 6th and 16th with the culmination of the first and third warm periods.

The extremes in temperature were well within the records of recent years. The highest recorded in the district was 87°, but temperatures above 80° occurred at very few stations north of Maryland. The lowest temperature for the district was 5°, but from Massachusetts southward the temperature did not fall below 20°, except over some small parts of the plateau and mountainous sections of New York and Pennsylvania. However, freezing temperatures occurred at all stations in the district, except Cape May City, N. J., and Eastville, Va., where the minimum temperatures were, respectively, 33° and 35°.

PRECIPITATION.

As in the preceding month there was an excess of precipitation in the New England, New York, Pennsylvania, and New Jersey sections; but in the remainder of the district the rainfall was slightly below the April average. However, in the southern as well as in the northern sections, the ground remained wet and unfit for cultivation during most of the month, for there was a marked deficiency in sunshine and the prevailing weather was cloudy with high humidity and very frequent showers, all of which tended to check the drying of the soil. In the small parts of West Virginia and Virginia included

within the district these conditions were much less marked, approaching those of the ordinary spring, but they were the most prominent features of the month over about nine-tenths of the district.

The distribution of the precipitation was not unusually irregular though the total amounts for the month ranged from 0.71 to 7.41 inches. Manchester, Vt., was the only station in the district that recorded less than 1 inch of precipitation and there were only 8 stations at which the total amount exceeded 6 inches. Three of these were in New York, 4 in Pennsylvania, and 1 in New Jersey.

No precipitation at excessive rates was reported during the month, the greatest 24-hour rainfall being 2 inches at Hamburg, Pa., on the 17th. The decided frequency of precipitation, the dates of the occurrence of the principal storms and the parts of the district affected by them may be seen most satisfactorily by an examination of Table 2.

SNOWFALL.

The snowfall may be treated as negligible southward of the latitude of southern Massachusetts, though traces of snow were observed even in Virginia, and measurable amounts fell at several stations in West Virginia, Maryland, and Pennsylvania. New York and the northern New England States were visited by several snowstorms, those of the 2d–3d and 8th–9th being the most important. Snow flurries were quite general in these sections on some later dates including the 29th. The heaviest snowfall occurred in the storm of the 2d and 3d when the central part of New York and the interior of northern New England were blanketed with snow to a depth of 4 to 10 inches or more. At Homer, N. Y., 12 inches of snow fell during this storm.

DESTRUCTIVE STORM OF APRIL 2, 1912.

The following account is taken from descriptions furnished by the Weather Bureau officials at Atlantic City, N. J., and Philadelphia, Pa.

A local storm of a violent and destructive character swept over the greater portion of the southern New Jersey counties on the evening of the 2d. Moving northeastward from the State of Delaware, the storm crossed the Delaware River in the vicinity of Philadelphia, Pa., where it unroofed many houses, and struck Camden, N. J., about 7 p. m. Within a period of not over five minutes nearly 200 buildings were entirely wrecked or seriously damaged, and fully 100 families were rendered practically homeless in Camden alone. Brick houses were either blown down, or the fronts torn out, roofs were lifted and carried away, trees were uprooted, and electric light wires were thrown sputtering in every direction. The area covered by the storm in Camden was comparatively small, but was densely populated. It is remarkable that none of the occupants of the demolished houses were killed, though several persons were severely injured by flying débris. The one death caused by the storm was that of a woman who was struck by falling timbers while riding in a trolley car the roof of which was crushed.

The property damage has been estimated at more than $100,000. The storm was described by the press as a tornado, but that it was of such nature has not been verified.

Continuing eastward the storm decreased in violence, but demolished buildings, uprooted trees, and killed live stock at several other places.

RIVER CONDITIONS.

The river stages averaged much higher than usual, the streams being well filled throughout the month, and flood stages occurred on the Connecticut, Hudson, Susquehanna, and other rivers. However, the water did not rise much above the banks at most places, and only moderate losses were sustained.

The Connecticut River was unusually high and at Hartford reached the highest stage since April 7, 1909. Floods occurred along this stream in Massachusetts and Connecticut on the 3d, the 8th–9th, and on the 19th–20th. Conditions over the upper watershed of the Connecticut River during the early part of the month were such as to indicate huge freshets. Large volumes of snow were stored in sheltered places, and the low temperatures of the season had caused unusual ice conditions. However, the absence of excessive rainfall or extended warm periods permitted the snow and ice to disappear so gradually that no great damage resulted from high water.

In the upper Hudson Valley the streams were nearly bank full during most of the month, and the flood stage was exceeded or closely approached three times, on the 2d, 8th, and 20th. The damage from erosion was slight, and the chief source of loss was the enforced suspension of business. The warnings issued served to save nearly all of the movable property along the river front.

In the southern part of the district the prevailing stages were farther below the flood line, which was exceeded at Binghamton, N. Y., on the 2d and at other points along the Susquehanna River as far as Wilkes-Barre, Pa., within the next 24 hours. The stream soon fell to moderate stages and remained so during the rest of the month.

SUNSHINE.

One of the most remarkable features of the month was the great deficiency in sunshine, the average amount for 14 stations being only 204 hours, or 51 per cent of the possible. The weather was especially cloudy over the central interior of the district, the number of clear days being less than 5 at many stations in Pennsylvania, New York, and New England. At Binghamton, N. Y., there were only 3 days with 80 per cent or more of the possible sunshine. According to the records of all stations the average number of clear days was 10, of partly cloudy days 9, and of cloudy days 11.

TABLE 1.—*Climatological data for April, 1912. District No. 1, North Atlantic States.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Maine.																				
Bar Harbor	Hancock	20	26	40.0	− 1.7	69	16	16	5	34	3.70	+ 0.59	0.80	13.5	10	18	2	10	nw.	William Miller.
Cornish	York	778	57	44.6	+ 1.8	79	16	20	4†	44	2.63	− 0.90	0.60	10.0	10	15	7	8	nw.	T. H. West.
Eastport	Washington	53	40	39.2	+ 0.9	64	21	16	9	27	3.06	+ 0.12	0.87	9.7	12	13	6	11	w.	U. S. Weather Bureau.
Fairfield	Somerset	90	27	41.6	+ 2.6	77	16	17	9	38	1.90	+ 0.13	0.48	7.2	8	10	9	11	.....	E. F. Parker.
Farmington	Franklin	450	15	40.4	− 2.0	76	16	17	5	41	2.91	+ 0.66	0.65	9.0	11	11	12	7	nw.	State Normal School.
Gardiner	Kennebec	163	20	43.1	− 0.5	74	16	19	4	40	3.36	+ 0.71	0.88	6.0	12	16	5	9	nw.	Samuel D. Soule.
Greenville	Piscataquis	1,000	8	35.0	.....	65	16	9	10	33	2.87	.....	0.58	8.2	11	.....	.....	.....	.....	U. S. Weather Bureau.
Houlton	Aroostook	362	10	36.4	.....	65	18	10	15	35	1.95	.....	0.90	3.0	6	18	10	2	s.	Bangor & Aroostook R. R.
Lewiston	Androscoggin	185	38	42.4	+ 0.6	78	16	22	4†	36	2.86	− 0.13	0.62	8.4	13	12	7	11	nw.	Union Water Power Co.
Madison	Somerset	257	9	38.4	.....	71	17	12	10	34	3.45	.....	1.08	9.2	10	19	2	9	nw.	William Jardine.
Millinocket	Penobscot	386	9	40.8	.....	71	26	13	9	44	2.34	.....	0.70	7.0	12	14	1	15	nw.	H. S. Ferguson.
North Bridgton	Cumberland	450	19	42.6	− 0.3	78	16	20	5	42	2.90	+ 0.07	0.89	5.0	8	10	16	4	se.	G. E. Chadbourne.
Orono	Penobscot	129	43	43.4	+ 2.9	81	25	16	9†	52	4.60	+ 1.84	0.98	.....	9	13	7	10	.....	Agricultural Exp. Station.
Patten	....do	550	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Bangor & Aroostook R. R.
Portland	Cumberland	99	41	42.5	− 0.5	73	16	23	9	32	3.49	+ 0.38	1.03	5.2	14	9	7	14	w.	U. S. Weather Bureau.
Presque Isle	Aroostook	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. L. Merriman.
Rumford Falls	Oxford	505	19	40.0	− 1.4	71	16	21	5†	34	2.44	− 0.72	0.62	9.2	12	17	6	7	nw.	Charles A. Mixer.
Winslow	Kennebec	90	17	42.6	+ 1.4	78	16	18	9	45	2.49	− 0.29	0.60	9.0	9	15	6	9	w.	Hollingsw'th & Whitney Co.
New Hampshire.																				
Alstead Center	Cheshire	1,120	8	42.2	− 1.8	72	16	15	4	35	3.12	+ 0.67	0.67	13.0	18	14	4	12	sw.	Frank Dewing.
Benton	Grafton	.....	3	38.7	.....	69	16	15	1†	42	3.26	.....	0.80	14.0	9	13	8	9	nw.	State Sanatorium.
Bethlehem	....do	1,470	20	39.5	− 1.0	71	16	11	1	38	2.97	+ 0.95	0.82	16.5	13	16	5	9	nw.	Benjamin Tucker.
Concord	Merrimack	350	52	44.2	+ 0.4	78	16	22	4	41	2.58	− 0.21	0.88	7.3	15	7	12	11	nw.	U. S. Weather Bureau.
Durham	Stafford	88	17	43.9	− 0.1	80	16	22	4	41	1.23	− 1.43	0.38	4.0	7	12[a]	4[a]	13[a]	sw.	Agricultural Exp. Station.
Franklin	Merrimack	440	13	44.2[b]	+ 1.0	79	16	19	4	44	3.08[b]	+ 0.03	0.80	11.0	16	12	10	8	nw.	Dr. C. P. Webster.
Grafton	Grafton	863	26	41.1	− 0.2	77	16	6	4	47	2.38	+ 0.09	0.60	11.0	12	16	4	10	w.	P. R. Kimball.
Hanover	....do	603	78	42.0	+ 0.4	76	16	12	4	44	2.51	+ 0.82	0.59	9.4	13	11	7	12	sw.	Dartmouth College.
Keene	Cheshire	506	27	44.6	+ 0.5	79	16	17	4	48	3.05	+ 0.74	0.87	4.5	17	9	12	9	nw.	Samuel Wadsworth.
Nashua	Hillsboro	125	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jackson Co.
Newton	Rockingham	.....	24	43.8	− 0.6	77	16	18	4	43	3.45	+ 1.04	0.80	2.5	12	8	16	6	nw.	W. C. Gale.
Plymouth	Grafton	500	24	41.0	− 0.2	74	16	19	5	44	3.01	+ 0.72	0.54	9.5	13	14	4	12	w.	Hattie G. Trow.
Vermont.																				
Bloomfield	Essex	.....	5	38.5	.....	71	16	5	4	42	2.77	.....	0.78	8.0	13	21	1	8	s.	Lyman Falls Power Co.
Cavendish	Windsor	910	9	42.2[b]	.....	76	16	14	4	40	1.89	.....	0.37	5.5	11	15[a]	3[a]	11[a]	.....	M. A. Kingsbury.
Chelsea	Orange	840	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W.F. Dewey.
Manchester	Bennington	980	13	42.0	.....	71	7	16	4	37	0.71	.....	0.31	4.0	3	10	13	7	sw.	N. M. Canfield.
Somerset	Windham	2,096	...	39.8	.....	73	6	10	4	43	4.03	.....	0.88	10.5	14	12	4	14	sw.	E. McD. Moore.
St. Johnsbury	Caledonia	711	19	43.6	+ 1.8	79	16	16	1†	50	3.14	+ 1.04	0.94	7.0	12	11	11	8	nw.	Fairbanks Museum.
Woodstock	Windsor	700	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John S. Eaton.
Massachusetts.																				
Amherst	Hampshire	222	23	46.2	+ 0.8	78	6	24	4	42	3.92	+ 0.89	1.03	1.0	17	7	12	11	sw.	Agricultural Exp. Station.
Blue Hill	Norfolk	640	28	45.0	+ 0.5	75	16	22	4†	37	4.05	+ 1.03	0.68	0.9	20	5	10	15	w.	Blue Hill Observatory.
Boston	Suffolk	124	42	47.3	+ 2.0	77	16	27	4	36	3.07	− 0.48	0.67	0.5	19	4	8	18	w.	U. S. Weather Bureau.
Chestnut Hill	....do	124	32	48.0	+ 1.4	79	16	24	4†	39	3.92	+ 0.47	0.66	.....	18	17	1	12	.....	Met. Water Board.
Clinton	Worcester	370	16	45.1	.....	73	16	23	3	43	4.36	.....	1.34	T.	18	.....	.....	.....	.....	Do.
Concord	Middlesex	139	22	45.6	+ 0.4	76	6†	24	4†	41	3.99	+ 1.48	1.00	1.1	19	6	10	14	sw.	Fred A. Tower.
Fall River	Bristol	200	46	46.0	− 0.4	72	6	24	4	25	3.57	+ 0.08	0.85	.....	20	4	22	4	nw.	C. V. S. Remington.
Fitchburg	Worcester	550	29	45.8	+ 0.2	78	16	22	4	39	3.13	+ 0.16	0.57	0.8	17	14	6	10	nw.	Dr. A. P. Mason.
Framingham	Middlesex	160	32	47.8	+ 1.1	76	6†	24	4†	41	4.12	+ 0.91	.....	0.5	17	.....	.....	.....	.....	Met. Water Board.
Hyannis	Barnstable	31	21	45.2	− 1.3	62	6	26	4	22	3.31	+ 0.10	0.76	.....	14	10	16	4	sw.	C. F. Sleeper.
Lawrence	Essex	51	28	45.1	− 1.0	75	16	23	4	40	3.99	+ 1.23	0.86	1.5	14	6	17	7	nw.	Essex Co.
Lowell	Middlesex	100	27	47.4	+ 2.1	75	15†	23	4	39	3.92	+ 0.44	0.87	.....	12	.....	.....	.....	.....	Props. Locks & Canals.
Middleboro	Plymouth	53	26	45.6	+ 0.9	74	6	21	5	38	3.58	+ 0.46	0.65	T.	17	4	.....	17	sw.	A. R. Gurney.
Monson	Hampden	420	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. G. E. Fuller.
Nantucket	Nantucket	15	26	44.5	+ 0.3	62	26	28	4	18	2.91	+ 0.27	0.80	T.	17	6	12	12	sw.	U. S. Weather Bureau.
New Bedford	Bristol	88	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	City Engineer.
Norfolk	Norfolk	244	9	46.7	.....	78	6	21	4	45	3.28	.....	1.04	T.	6	2	1	27	sw.	Ruby H. Martyn.
Northampton	Hampshire	205	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. E. Hoxie.
Plymouth	Plymouth	.....	27	44.4	.....	74	7†	22	4	38	3.82	.....	0.80	T.	14	13	4	13	w.	Laura B. Knapp.
Provincetown	Barnstable	40	25	43.2	− 1.6	62	6†	25	4	23	3.96	+ 1.06	0.80	T.	12	15	0	15	sw.	Gideon Bowley.
Rockport	Essex	25	10	43.4	.....	68	21	24	4	29	2.97	.....	0.70	0.1	9	9	12	9	nw.	C. F. P. Bearse.
Rutland	Worcester	1,160	10	43.2	.....	73	6†	19	3	47	4.44	.....	1.11	1.2	14	18	6	6	w.	State Sanatorium.
South Egremont	Berkshire	764	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Roscoe C. Taft.
Turners Falls	Franklin	200	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Turners Falls Co.
Westboro	Worcester	298	38	50.8	+ 4.6	80	6	25	4†	44	4.37	+ 1.37	1.00	T.	12	.....	.....	.....	.....	G. S. Newcomb.
Williamstown	Berkshire	711	31	44.6	+ 0.6	73	16	20	4	38	4.12	+ 1.59	0.92	1.2	14	9	10	11	w.	Williams College.
Worcester	Worcester	518	20	47.3	+ 1.3	80	16	26	4†	32	4.98	+ 1.96	0.71	T.	18	7	11	12	sw.	G. W. Swan.
Rhode Island.																				
Block Island	Newport	26	32	43.8	0	60	16	29	4	16	3.85	+ 0.23	1.04	0	17	7	8	15	sw.	U. S. Weather Bureau.
Bristol	Bristol	53	26	45.4	+ 0.3	60	15†	27	4	21	3.98	+ 0.69	0.91	T.	16	10[a]	9[a]	10[a]	nw.	N. G. Herreshoff.
Kingston	Washington	250	23	43.8	− 1.0	73	16	21	4	31	4.61	+ 0.38	1.00	0	12	7	12	11	w.	Nathaniel Helme.
Narragansett Pier	Newport	22	30	44.1	− 0.6	67	16	24	4	24	5.09	+ 1.56	1.06	0	19	12	7	11	sw.	U. S. Weather Bureau.
Providence	Providence	182	8	46.4	− 0.2	76	6†	24	4	35	3.61	+ 0.06	0.94	.....	17	5	13	12	.....	Do.
Connecticut.																				
Bridgeport	Fairfield	20	19	47.8	.....	78	6	25	4	38	4.14	.....	1.04	T.	18	8	11	11	sw.	William Jennings.
Canton	Hartford	900	51	46.2	+ 1.7	78	6	23	4	45	4.27	+ 1.05	0.98	0.5	16	7	8	15	nw.	G. J. Case.
Colchester	New London	370	26	44.8	− 1.6	75	6	19	4	39	5.11	+ 1.50	1.00	T.	14	7	14	9	e.	S. P. Willard.
Cream Hill	Litchfield	1,300	16	43.0	− 0.4	74	6†	18	4	34	4.28	+ 0.68	1.01	3.0	16	7	4	19	e.	C. L. Gold.
Danielson	Windham	300	10	45.9	.....	76	6	22	4	42	4.11	.....	1.10	.....	10	10	8	12	n.	F. E. Bitgood.
Hartford	Hartford	159	8	47.2	+ 0.5	78	6	26	4	41	3.93	+ 0.36	1.07	T.	17	3	10	17	nw.	U. S. Weather Bureau.
Hawleyville	Fairfield	600	14	46.8	+ 0.4	76	16	21	4	38	4.48	+ 0.32	1.30	.....	19	7	5	18	nw.	C. B. Hawley.
New Haven	New Haven	107	125	47.5	+ 1.1	77	6	25	4	34	4.56	+ 1.00	1.37	T.	16	3	14	13	s.	U. S. Weather Bureau.
New London	New London	47	42	48.1	+ 2.6	68	6†	26	4	33	4.35	+ 0.85	1.08	0	12	7	12	11	nw.	T. C. Dillon.
North Grosvenor Dale	Windham	400	22	45.9	− 0.3	78	6	23	3	43	4.64	+ 1.62	1.19	T.	11	7	12	11	sw.	Grosvenor Dale Co.
Norwalk	Fairfield	116	22	47.4	+ 1.3	76	6	22	4	41	3.62	+ 1.29	0.90	.....	11	13	7	10	sw.	Geo. C. Comstock.
Southington	Hartford	140	43	46.2	+ 0.4	77	6	24	4†	46	4.17	+ 1.28	0.70	T.	15	5	21	4	nw.	Luman Andrews.
Storrs	Tolland	640	24	46.0[a]	+ 1.0	76	6	22	4	49	3.09	+ 0.25	0.60	.....	9	10[a]	7[a]	12[a]	w.	Agricultural Exp. Station.
Torrington	Litchfield	625	11	45.2	.....	78	7†	22	9	43	4.17	.....	0.88	.....	19	12	7	11	ne.	Prof. E. H. Forbes.
Voluntown	New London	260	27	45.8	− 0.7	78	6	19	5	45	5.01	+ 1.50	1.32	.....	16	10	9	11	sw.	J. L. Herbert.
Waterbury	New Haven	400	37	47.8	+ 0.8	80	6	21	4	47	4.38	+ 1.58	0.91	T.	15	.....	.....	.....	.....	N. J. Welton.

TABLE 1.—*Climatological data for April, 1912. District No. 1*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
New York.																				
Addison	Steuben	1,000	22	47.5	+ 1.5	80	6	21	4	44	4.32	+ 1.58	1.37	3.0	15	11	11	8	sw.	Dr. H. R. Ainsworth.
Albany	Albany	97	91	45.8	0.0	76	6	24	4	40	3.31	+ 0.92	0.78	5.7	17	9	10	11	nw.	U. S. Weather Bureau.
Amsterdam	Montgomery	277	8	42.6	.....	75	6	17	4	42	3.32	.....	1.10	11.0	17	14	6	10	w.	Emery Elwood.
Athens	Greene	90	10	46.2	− 0.5	78	6†	24	4	40	4.24	+ 1.32	0.96	2.5	14	7	10	13	sw.	E. C. Brooks.
Ballston Lake	Saratoga	400	8	43.2	.....	73	6	19	4	42	2.93	.....	0.94	7.9	19	10	8	12	w.	George R. Schauber.
Bedford	Westchester	450	21	48.3	+ 0.3	80	6	24	4	43	4.06	+ 0.44	1.14	T.	17	14	8	8	.....	Dr. L. Rosenberg.
Beerston	Delaware	1,214	0	44.4	.....	75	6†	18	4	41	5.58	.....	0.93	1.0	15	10	4	16	w.	John Q. Barlow.
Binghamton	Broome	875	21	44.4	0.0	75	6	20	4	36	4.19	+ 1.94	0.94	4.2	18	1	8	21	nw.	U. S. Weather Bureau.
Bouckville	Madison	1,350	15	41.6	− 0.4	70	6	13	4	35	5.10	+ 2.30	0.80	18.0	18	6	8	16	nw.	L. W. Griswold.
Boyds Corners	Putnam	560	30	.....	.....	.....	.....	.....	.....	.....	4.82	+ 1.38	.....	.....	.....	.....	.....	.....	.....	Thomas Manning.
Carmel	do	500	20	45.8	− 1.7	77	5	24	1†	46	3.99	+ 0.65	1.54	0	15	10	6	14	nw.	Do.
Chatham	Columbia	470	11	45.4	− 0.3	77	6†	21	4	41	4.52	+ 1.51	0.93	.....	16	10	8	12	n.	Morton R. Tank.
Cooperstown	Otsego	1,250	53	42.2	+ 1.0	72	7	15	4	40	3.81	+ 1.09	0.90	9.0	15	14	9	7	s.	Miss Elizabeth C. Keese.
Corinth	Saratoga	542	10	.....	.....	.....	.....	.....	.....	.....	4.04	.....	0.68	.....	12	.....	.....	.....	.....	A. M. Hollister.
Cortland	Cortland	1,129	50	44.4	+ 1.7	73	6†	14	4	44	3.49	+ 0.53	0.90	9.0	14	8	10	12	nw.	F. G. Baker.
Cutchogue	Suffolk	32	13	46.2	− 0.5	70	16	27	4	26	6.08	+ 2.22	1.87	0	16	7	15	8	sw.	William A. Fleet.
De Ruyter	Madison	1,300	9	43.0	+ 1.4	73	6	13	4	45	2.88	+ 0.01	0.61	10.3	16	12	2	16	s.	B. D. Crandall.
Elmira	Chemung	863	29	47.0	+ 0.8	78	6	24	4	35	3.11	+ 0.16	.....	3.0	15	6	8	16	sw.	Thurber A. Brown.
Ephratah	Fulton	692	0	.....	.....	.....	.....	.....	.....	.....	3.05	.....	0.45	4.6	17	8	10	12	w.	Victor Gennett.
Glens Falls	Warren	340	21	43.7	− 1.9	73	16	11	5	41	3.34	+ 1.11	0.58	14.5	17	11	2	17	n.	Prof. C. L. Williams.
Gloversville	Fulton	850	20	41.3	− 1.9	72	6	14	4	37	4.64	+ 1.59	1.10	11.0	17	9	11	10	w.	W. L. McLean.
Greenfield Center	Saratoga	314	14	43.6	− 1.4	73	6†	19	4	40	3.06	+ 0.23	0.80	10.0	13	12	10	8	sw.	S. E. Darrow.
Greenwich	Washington	425	15	45.4	− 2.3	77	16	17	4	36	3.41	+ 0.99	0.38	6.5	17	15	11	4	s.	Homer J. Whitcomb.
Griffin Corners	Delaware	2,200	12	42.6	+ 1.1	75	6	18	4	41	7.18	+ 3.55	1.80	1.0	12	.....	.....	.....	w.	Harold O. Judd.
Haskinville	Steuben	.....	17	.....	.....	.....	.....	.....	.....	.....	3.79	+ 1.50	1.10	9.0	11	.....	.....	.....	.....	W. G. Collins.
Homer	Cortland	1,096	21	42.4	− 0.7	72	6	14	4	37	4.28	.....	0.90	12.2	15	8	8	14	nw.	Charles G. Mortimer.
Hoosick Falls	Rensselaer	410	10	.....	.....	.....	.....	.....	.....	.....	3.74	.....	0.90	4.7	18	.....	.....	.....	.....	Sanford L. Cluett.
Indian Lake	Hamilton	1,705	13	37.6	− 1.1	65	6†	11	9	44	3.20	+ 0.44	0.70	14.5	16	14	2	14	n.	Lester Severie, jr.
Jeffersonville	Sullivan	1,240	9	44.6	.....	77	16	22	3†	41	4.61	.....	1.18	T.	14	8	14	8	w.	Charles Wilfert, jr.
Liberty	do	2,300	30	39.7	− 0.7	73	18	17	4	38	7.41	+ 3.55	1.25	T.	13	11	2	17	nw.	Dr. H. M. King.
Little Falls	Herkimer	924	14	41.8	− 1.5	68	6	14	4	39	3.18	+ 0.59	0.68	11.0	15	12	6	12	w.	O. J. Demster.
Mohonk Lake	Ulster	1,245	16	44.8	− 0.3	75	16	20	3	37	4.95	+ 1.75	1.27	T.	14	7	4	19	sw.	A. K. Smiley.
Morehouseville	Hamilton	1,697	4	37.6	.....	65	6	6	4	44	4.92	.....	0.73	.....	12	18	4	8	w.	Theo. C. Remonda.
Morrisville	Madison	1,325	0	43.5	.....	71	6	17	4	38	5.27	.....	0.80	16.0	15	15	7	8	sw.	Prof. I. M. Charlton.
Mount Hope	Westchester	200	15	50.0	− 2.2	78	16	26	4	37	3.20	+ 0.88	0.50	0	10	5	16	9	.....	W. A. Cornelius.
Newark Valley	Tioga	825	25	.....	.....	.....	.....	.....	.....	.....	5.44	+ 2.87	0.97	6.3	16	5	7	18	.....	Lyman D. Clinton.
New Berlin	Chenango	1,090	5	.....	.....	.....	.....	.....	.....	.....	4.25	.....	0.71	.....	12	.....	.....	.....	.....	Chas. F. Sarle.
Newcomb	Essex	1,600	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Edward Spain.
New Lisbon	Otsego	1,234	22	41.5	+ 0.3	72	6	13	4	42	4.27	+ 0.90	0.90	6.0	18	3	11	16	s.	G. A. Yates.
New York City	New York	314	87	49.0	+ 0.9	74	6	27	4	32	3.61	+ 0.31	0.95	T.	16	7	11	12	nw.	U. S. Weather Bureau.
North Creek	Warren	1,002	4	40.0	.....	70	16	20	9	41	3.10	.....	0.78	6.0	11	11	9	10	s.	W. G. Kenwell.
Northville	Fulton	742	10	.....	.....	.....	.....	.....	.....	.....	3.43	.....	0.59	9.0	10	.....	.....	.....	.....	P. C. Picard.
Oneonta	Otsego	1,112	18	44.9	− 0.3	74	6	20	4	38	3.94	+ 1.41	0.76	4.0	18	10	6	14	sw.	H. W. Lee.
Oxford	Chenango	916	47	43.6	− 0.2	72	16	16	4	36	4.75	+ 1.76	0.71	7.0	17	4	14	12	w.	J. P. Davis.
Oyster Bay	Nassau	40	8	.....	.....	.....	.....	.....	.....	.....	4.24	.....	0.75	0	13	14	0	16	sw.	Prof. Thos. Colby.
Port Jervis	Orange	470	28	48.4	+ 1.1	83	16	21	4	44	4.11	+ 1.10	1.16	T.	18	10	10	10	ne.	W. H. Nearpass.
Rome	Oneida	445	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John O'Mara.
Roslyn	Nassau	215	0	48.8	.....	76	6	25	4	31	4.03	.....	0.87	0	17	19	2	9	nw.	C. H. Hechler.
Salisbury	Herkimer	1,526	15	37.0	− 4.4	67	16	5	8	40	4.90	+ 1.88	0.74	11.0	16	10	13	7	w.	Joseph Ryan.
Scarsdale	Westchester	200	8	50.6	.....	78	16	24	4	41	2.95	.....	0.75	T.	11	13	7	10	ne.	C. H. Wilmarth.
Setauket	Suffolk	40	27	47.4	0.0	76	6	27	4	34	5.95	+ 0.47	1.80	T.	13	14	5	11	w.	Selah B. Strong.
Sherburne	Chenango	.....	5	.....	.....	.....	.....	.....	.....	.....	3.60	.....	0.79	11.4	10	.....	.....	.....	.....	E. B. Collins.
Southampton	Suffolk	36	11	45.7	− 0.3	66	16	27	4†	21	5.00	+ 0.70	1.10	T.	17	8	14	8	sw.	W. L. Jagger.
Southeast Reservoir	Putnam	310	7	.....	.....	.....	.....	.....	.....	.....	3.84	+ 0.43	.....	.....	.....	.....	.....	.....	.....	Thomas Manning.
South Edmeston	Otsego	1,300	0	43.3	.....	73	6	12	4	41	4.21	.....	0.56	9.0	17	9	7	14	s.	F. H. Bilderbeck.
Spier Falls	Saratoga	400	11	43.4	.....	71	6†	11	4	41	3.43	+ 0.93	0.81	10.0	13	7	15	8	w.	George E. Fifield.
Trenton Falls	Oneida	751	9	.....	.....	.....	.....	.....	.....	.....	3.49	.....	0.82	.....	16	.....	.....	.....	.....	C. W. Young.
Tribes Hill	Montgomery	268	9	.....	.....	.....	.....	.....	.....	.....	2.80	.....	0.60	8.0	9	.....	.....	.....	.....	R. S. Marshall.
Utica	Oneida	537	46	.....	.....	.....	.....	.....	.....	.....	4.13	+ 1.46	0.67	.....	14	.....	.....	.....	.....	W. E. Young.
Wading River	Suffolk	112	6	47.0	.....	76	6†	26	4†	41	5.83	.....	1.39	0	14	17	3	10	sw.	H. B. Fullerton.
Wappingers Falls	Dutchess	110	22	47.2	− 1.0	77	16	22	3	40	5.29	+ 1.82	1.08	T.	13	8	14	8	e.	H. C. Townsend.
Warwick	Orange	538	18	.....	.....	.....	.....	.....	.....	.....	4.25	+ 1.20	1.00	0	15	.....	.....	.....	.....	John W. Sly.
Waverly	Tioga	824	30	47.7	+ 2.2	79	6	18	4	46	4.47	+ 2.01	1.40	2.7	17	2	13	15	ne.	J. F. Shoemaker.
Wells	Hamilton	1,000	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vernon E. Dewey.
West Berne	Albany	946	13	43.5	+ 0.6	74	6†	18	4	44	4.16	+ 1.17	0.60	14.0	10	3	12	15	w.	W. J. Haverly.
West Point	Orange	167	63	50.0	− 1.5	80	6	26	4	42	3.99	+ 0.35	1.30	0	12	10	11	9	w.	U. S. Military Academy.
Windham	Greene	1,520	12	45.2	+ 3.1	84	16	18	4†	45	5.57	+ 2.32	0.72	3.8	17	6	16	8	.....	A. R. Mott.
Pennsylvania.																				
Altoona	Blair	1,181	24	54.5	+ 7.1	79	17	28	8	39	3.10	+ 0.24	0.65	0	14	.....	.....	.....	.....	C. W. Billin.
Bethlehem	Northampton	260	11	52.2	+ 0.8	79	6	25	4	43	3.67	+ 0.81	0.65	0	16	16	3	11	w.	Prof. E. C. Roest.
Clearfield	Clearfield	1,107	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Raymond C. Ogden.
Drifton	Luzerne	1,633	14	45.0	− 0.1	75	6	18	4†	41	6.85	+ 2.59	1.08	2.7	17	15	4	11	e.	Eckley B. Coxe, jr.
Emporium	Cameron	1,050	25	47.2	− 0.1	75	6†	24	20	42	4.30	+ 1.18	1.31	0.5	12	8	9	13	e.	T. B. Lloyd.
Ephrata	Lancaster	384	12	50.9	+ 1.1	80	16	25	4	40	2.70	− 0.42	0.46	T.	12	10	4	16	w.	W. L. Frantz.
Everett	Bedford	1,080	14	52.1	+ 4.6	80	6†	27	4	48	3.83	+ 1.03	0.88	0.1	8	3	14	13	nw.	B. L. Steckman.
George School	Bucks	184	5	50.2	.....	79	15	24	4	40	3.44	.....	0.62	0	18	17	4	9	s.	N. W. Swayne.
Gettysburg	Adams	600	38	53.2	+ 3.1	83	16	24	4	44	3.11	− 0.40	0.63	T.	14	8	12	10	nw.	Col. E. B. Cope.
Gordon	Schuylkill	804	8	48.8	.....	78	6	23	12	46	5.04	.....	0.90	0	16	9	9	12	w.	Capt. J. G. Johnson.
Hamburg	Berks	380	16	52.6	+ 2.6	78	6	26	8	43	7.31	+ 3.66	2.00	0	9	10	6	14	se.	W. J. Kalbach.
Harrisburg	Dauphin	361	24	51.8	+ 1.1	77	6	31	8	37	3.95	+ 1.46	1.16	T.	14	6	8	16	nw.	U. S. Weather Bureau.
Huntingdon	Huntingdon	650	24	52.8	+ 3.7	81	6	26	4†	45	4.52	+ 1.54	0.70	0	14	9	8	13	w.	Prof. W. J. Swigart.
Hyndman	Bedford	977	5	53.2	.....	83	12	26	9	47	3.65	.....	0.76	T.	12	6	13	11	sw.	H. C. Mauk.
Lancaster	Lancaster	.....	16	50.9	.....	80	16	26	9	44	3.24	+ 0.04	0.53	T.	12	14	5	11	e.	F. H. Shaw.
Lawrenceville	Tioga	1,006	14	48.8*	+ 4.3	80	6	21	4	49	2.45	− 0.54	1.40	3.0	9	4	15	11	.....	C. P. Darling.
Lebanon	Lebanon	458	25	50.6	+ 0.7	78	6†	29	4	43	4.03	+ 0.86	0.60	T.	15	7	13	10	w.	Sowers & Rothermal.
Le Roy	Bradford	1,400	23	45.4	+ 0.7	75	6	20	4	38	4.93	+ 1.69	1.20	0.7	20	4	10	16	sw.	G. W. T. Warburton.
Lock Haven	Clinton	560	24	52.3	+ 2.5	80	6†	28	4†	42	4.70	+ 1.65	1.41	T.	16	3	14	13	w.	Prof. J. A. Robb.
Marion	Franklin	640	8	53.0	.....	80	12	27	4	43	4.94	.....	1.02	0	12	12	7	11	.....	Hon. C. B. Hege.
Mauch Chunk	Carbon	634	23	49.2	+ 0.8	80	6†	26	4	47	5.23	+ 1.87	0.88	0	16	12	7	11	w.	F. C. Wintermute.
Mifflintown	Juniata	445	8	50.7	.....	80	6	24	8	42	4.46	.....	0.75	0	15	13	5	12	w.	Wellington Smith.
Milford	Pike	455	9	46.8	.....	78	16	19	4†	46	4.74	.....	1.44	T.	22	8	13	9	se.	Mrs. Alla Doughty.
Montrose	Susquehanna	1,658	8	44.3	.....	72	6†	19	9	41	7.31	.....	1.30	3.0	18	9	9	12	nw.	Silas Jagger.
Muncy Valley	Sullivan	519	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. W. Buck.

TABLE 1.—*Climatological data for April, 1912. District No. 1*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Pennsylvania—Contd.																				
New Germantown	Perry	873	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ed. C. Johnston.
Philadelphia	Philadelphia	117	41	52.5	+ 1.7	77	6	32	4	32	2.89	− 0.02	0.58	T.	15	6	11	13	nw.	U. S. Weather Bureau.
Pocono Lake	Monroe	1,662	10	44.4	+ 2.4	71	16	18	4	37	5.47	+ 1.67	1.25	0	12	4	3	23	w.	Pocono Lake Ice Co.
Reading	Berks	280	39	51.1	+ 0.3	79	6†	28	4	41	3.39	+ 0.15	0.70	T.	14	6	11	13	se.	Emil L. Nuebling.
Scranton	Lackawanna	805	12	47.8	+ 0.7	78	16	25	3	36	3.78	+ 1.13	0.93	0.3	17	3	11	16	s.	U. S. Weather Bureau.
Selinsgrove	Snyder	455	24	51.1	+ 1.6	78	6	27	8	42	4.73	+ 1.77	0.84	T.	15	0	15	15	se.	J. M. Boyer, C. E.
State College	Center	1,191	24	50.2	+ 2.9	79	6†	25	4†	38	4.08	+ 1.05	0.82	1.0	17	.....	.....	.....	nw.	Prof. Wm. Frear.
Towanda	Bradford	754	17	47.6	+ 1.4	76	6†	24	4	39	4.87	+ 2.49	1.30	0.3	17	6	2	22	nw.	Hiram E. Bull, C. E.
Wellsboro	Tioga	1,327	35	46.9	+ 2.7	79	6†	19	22	4	4.38	+ 1.09	1.37	0	12	14	10	6	sw.	O. L. White.
West Chester	Chester	455	58	51.1	+ 1.8	78	6†	28	4	38	3.52	− 0.13	0.52	0	18	11	6	13	sw.	J. C. Green, D. D. S.
Williamsport	Lycoming	530	22	50.7	+ 3.0	80	6	19	8	40	4.13	+ 1.32	0.74	0	12	16	3	11	se.	Henry H. Guise.
New Jersey.																				
Atlantic City	Atlantic	16	39	48.4	+ 0.8	63	24	28	4	21	2.59	− 0.40	0.55	0	13	8	8	14	sw.	U. S. Weather Bureau.
Bayonne	Hudson	50	22	50.5	+ 1.5	79	16	27	4	34	3.95	+ 0.27	0.92	T.	14	10	8	12	nw.	Erskine R. Eadie.
Belvidere	Warren	289	22	50.3	+ 0.7	78	6†	25	4	43	6.02	+ 2.75	1.40	0	16	10	10	10	.....	Samuel J. Hixson.
Boonton	Morris	230	22	.....	.....	.....	.....	.....	.....	.....	3.32	− 0.44	0.66	T.	17	.....	.....	.....	n.	Foster Peer.
Bridgeton	Cumberland	30	31	53.0	+ 1.2	79	6	28	4†	39	3.02	− 0.41	1.59	0	10	11	6	13	sw.	Henry A. Jorden.
Burlington	Burlington	12	26	.....	.....	.....	.....	.....	.....	.....	2.67	− 0.70	0.54	0	13	10	8	12	sw.	D. S. B. McCoy.
Cape May	Cape May	17	34	50.6	+ 1.6	66	24	33	4	24	1.81	− 1.18	0.45	0	13	8	11	11	s.	U. S. Weather Bureau.
Charlotteburg	Passaic	719	20	48.6	+ 1.9	76	6	22	4	43	3.93	0.00	.....	0	13	10	9	11	sw.	George S. Briggs.
Chatham	Morris	234	10	.....	.....	.....	.....	.....	.....	.....	3.28	− 0.21	0.70	0	15	.....	.....	.....	nw.	M. A. Butler.
Culvers Lake	Sussex	848	11	.....	.....	.....	.....	.....	.....	.....	4.22	+ 0.35	0.99	0.5	17	10	8	12	e.	Brice E. Riker.
Dover	Morris	600	28	47.6	+ 0.3	76	6†	24	4	40	3.81	+ 0.30	0.53	T.	13	8	10	12	.....	William C. Harris.
Flemington	Hunterdon	140	24	50.6	+ 1.5	79	16	26	4	42	3.94	+ 0.50	0.75	0	15	10	7	13	sw.	Hiram E. Deats.
Haddonfield	Camden	75	25	51.6	+ 0.8	77	6†	27	9	38	3.54	+ 0.44	0.90	T.	17	7	14	9	ne.	Charles F. Richardson.
Hammonton	Atlantic	103	14	.....	.....	.....	.....	.....	.....	.....	3.67	− 0.17	1.13	0	13	.....	.....	.....	.....	Orville Bassett.
Hightstown	Mercer	119	20	50.9	+ 1.1	80	16	24	4	42	4.14	+ 0.23	1.27	0	15	10	9	11	nw.	Ernst Wenger.
Highwood	Bergen	90	25	49.4	+ 0.9	80	6	24	4	44	3.24	− 0.15	0.83	T.	16	.....	.....	.....	sw.	Charles J. Bates.
Imlaystown	Monmouth	106	24	50.6[a]	0.0	79[a]	15†	24[a]	4	40[a]	3.05	− 0.45	0.90	0	13	10	10	10	sw.	Dr. Fred C. Price.
Indian Mills	Burlington	76	23	52.0	+ 1.7	80	6†	21	9	46	3.16	+ 0.03	0.70	T.	14	10	10	10	sw.	James Armstrong.
Jersey City	Hudson	15	14	51.0	+ 1.6	79	6	28	4	36	3.29	− 0.41	1.05	T.	14	6	13	11	nw.	Samuel K. Pearson, jr.
Lakewood	Ocean	54	10	50.2	+ 1.3	79	16	26	9	41	2.89	− 0.72	0.88	0	16	.....	.....	.....	sw.	Ralph Robertson.
Lambertville	Hunterdon	95	25	51.6	+ 1.2	78	6†	26	4	39	3.91	+ 0.51	0.80	T.	11	10	9	11	nw.	William R. Bowne.
Layton	Sussex	550	13	48.7	+ 2.2	79	6†	21	9	44	4.08	+ 0.77	0.93	T.	18	10	8	12	sw.	Warren C. Hursh.
Little Falls	Passaic	175	10	.....	.....	.....	.....	.....	.....	.....	3.13	− 0.41	0.61	0	15	.....	.....	.....	w.	A. Sweetman.
Long Branch	Monmouth	30	5	47.2	.....	77	6	24	4	41	4.41	.....	1.06	0	16	.....	.....	.....	.....	William D. Martin, jr.
Mahwah	Bergen	312	10	.....	.....	.....	.....	.....	.....	.....	3.74	+ 0.27	0.87	0	12	.....	.....	.....	.....	Charles L. Barker.
Moorestown	Burlington	75	50	52.7	+ 2.7	77	15	28	4†	36	3.27	+ 0.08	0.78	0	15	7	14	9	nw.	George L. Gillingham.
Newark	Essex	140	69	51.3	+ 2.2	80	16	32	4	37	3.18	− 0.55	0.54	0	15	10	5	15	se.	Prof. William Wiener.
New Brunswick	Middlesex	100	59	50.4[a]	+ 0.7	79[a]	6	25[a]	4	37[a]	4.13	+ 0.34	0.70	0	13	9	11	10	nw.	George B. Thrasher.
Newton	Sussex	678	33	49.0	+ 1.4	77	16	24	4	39	4.93	+ 1.72	1.14	T.	16	8	8	14	sw.	F. Vernon Losee.
Northfield	Atlantic	.....	5	.....	.....	.....	.....	.....	.....	.....	2.65	.....	0.78	0	13	8	8	14	.....	William L. Flick.
Paterson	Passaic	80	41	51.4	+ 1.1	82	6	26	4	39	2.96	− 0.53	0.68	T.	15	5	18	7	sw.	Heber A. Probert.
Phillipsburg	Warren	363	22	49.6	0.0	79	6†	26	4	41	3.74	+ 0.72	0.74	0	17	10	10	10	sw.	D. W. Smith.
Plainfield	Union	100	26	50.1	+ 1.9	81	16	25	4†	40	3.91	+ 0.01	0.83	T.	15	8	10	12	sw.	John Neagle.
Pleasantville	Atlantic	26	14	.....	.....	.....	.....	.....	.....	.....	2.45	− 1.07	0.94	0	12	11	9	10	.....	Lincoln Van Gilder.
Pompton Plains	Morris	195	10	.....	.....	.....	.....	.....	.....	.....	3.39	− 0.17	0.76	0	15	.....	.....	.....	nw.	M. S. Taylor.
Somerville	Somerset	76	29	50.8	+ 2.1	82	16	26	4†	44	4.58	+ 1.03	1.18	0	15	7	13	10	e.	Peter Hardcastle.
South Orange	Essex	200	42	49.6	+ 1.3	79	16	25	4	37	2.77	− 0.72	0.54	T.	15	6	13	11	sw.	Dr. Wm. J. Chandler.
Sussex	Sussex	442	22	48.6	+ 0.3	78	16	24[a]	4	42[a]	5.01	+ 1.76	1.08	0	15	9	7	14	sw.	George Dymock.
Trenton	Mercer	63	41	52.2[a]	+ 0.8	80	16	26[b]	4	43[b]	3.77	+ 0.12	1.02	T.	15	10	8	12	sw.	James L. Bennett.
Woodbine	Cape May	43	21	53.0[b]	+ 3.5	76[b]	6	25[a]	4	34[b]	3.00	− 0.58	0.78	0	14	.....	.....	.....	.....	Prof. O. E. Williams.
West Virginia.																				
Bayard	Grant	2,500	10	51.7	+ 5.0	80	15	21	3	47	3.21	− 0.81	0.88	0.4	14	7	10	13	w.	Solomon Clark.
Burlington	Mineral	875	17	52.9	+ 2.4	85	15†	26	4	49	2.00	− 0.58	0.85	0	6	8	19	3	w.	J. W. Vandiver.
Franklin	Pendleton	.....	5	57.0	.....	82	14†	28	4	49	.....	.....	.....	.....	.....	4	10	16	.....	Fred Calhoun.
Lost City	Hardy	.....	5	52.4	.....	74	15	28	8	36	1.43	.....	0.36	T.	9	8	14	8	s.	B. D. Hinegardner.
Martinsburg	Berkeley	435	21	53.8	+ 2.8	83	12	28	4	48	2.49	− 0.49	0.53	0	13	13	7	10	s.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	15	57.4	+ 5.8	87	12	30	4	48	1.66	− 1.10	0.75	0	6	9	17	4	sw.	John C. Fisher.
Romney	Hampshire	824	16	53.2[i]	+ 2.1	.....	.....	30	8	45[i]	1.37	− 1.26	.....	0	.....	8[i]	8[i]	5[i]	w.	John C. Linthicum.
Upper Tract	Pendleton	1,230	14	56.7[a]	+ 6.1	83[a]	15	25[a]	4	45[a]	1.09	− 1.34	0.47	0	3	4	19	7	w.	J. M. Mallow.
Maryland.																				
Annapolis	Anne Arundel	45	40	55.6[a]	+ 2.5	84	3	30	4	47[a]	2.45	− 1.33	1.20	0	9	.....	.....	.....	s.	U. S. Naval Academy.
Baltimore	Baltimore	115	42	54.6	+ 1.6	80	6	32	4	34	1.94	− 1.33	0.47	0	14	9	10	11	sw.	U. S. Weather Bureau.
Cambridge	Dorchester	25	14	58.4	+ 3.5	84	15	30†	4	46	2.82	− 0.34	0.75	0	9	12	12	6	s.	T. E. Keenan.
Cheltenham	Prince Georges	230	12	56.0	+ 2.8	79	12	25	4	38	2.32	− 1.30	0.50	0	14	12	5	13	nw.	Geo. Hartnell.
Chestertown	Kent	80	27	55.6	+ 4.2	78	15	28	4	35	2.37	− 1.14	0.60	0	11	7	12	11	w.	M. W. Thomas.
Chewsville	Washington	530	15	52.9	+ 2.4	80	16	25	4	42	2.50	+ 0.03	0.50	T.	12	11	14	5	sw.	D. Paul Oswald.
Clear Spring	do	650	15	51.9	+ 1.3	80	12	30†	4	43	3.52	+ 0.28	0.59	T.	14	8	16	6	w.	W. W. Frantz.
Coleman	Kent	80	14	.....	.....	.....	.....	.....	.....	.....	2.58	− 0.56	0.84	0	9	.....	.....	.....	.....	J. S. Harris.
College Park	Prince Georges	170	22	54.8	+ 2.4	79	15	24	4	43	3.28	− 0.20	0.60	0	12	14	8	8	s.	Prof. H. J. Patterson.
Cumberland	Allegany	623	38	57.5	.....	86	15	31†	4	44	3.11	+ 0.52	1.05	T.	11	8	10	12	w.	F. E. Harrington.
Darlington	Harford	300	20	53.8[a]	+ 2.5	79	6	27	4	43[a]	2.46	− 0.62	0.38	0	13	10	13	7	sw.	Prof. A. F. Galbreath.
Denton	Caroline	42	17	55.0	+ 3.1	78	15	27	4	36	3.52	+ 0.69	1.05	0	12	14	8	8	s.	H. B. Mason.
Easton	Talbott	35	21	55.7	+ 2.7	76	12	29	4	35	2.24	− 0.94	0.45	0	11	16	3	11	w.	Henry Shreve.
Emmitsburg	Frederick	720	39	56.0	+ 4.5	81	6	29	3	51	2.65	− 0.55	0.85	0	6	17	2	11	sw.	J. M. Sheridan.
Fallston	Harford	450	42	52.4	+ 1.9	78	6	26	4	38	3.12	− 0.49	0.49	0	15	0	21	9	sw.	J. H. Curtiss.
Frederick	Frederick	275	35	55.2	+ 2.9	82	12	30	4	40	2.32	− 1.01	0.48	T.	14	14	1	15	sw.	Chas. S. Birely.
Frosburg	Allegany	1,929	11	53.6	.....	82	15	25	8	37	3.86	− 0.08	0.63	T.	16	11	12	7	nw.	R. A. Walter.
Great Falls	Montgomery	200	21	54.4	+ 1.8	82	12	26	4	48	1.44	− 1.40	0.50	0	9	11	7	12	nw.	J. W. Bissett.
Green Springs Furnace	Washington	450	20	55.0	+ 3.6	80†	12	26	4	42	2.85	+ 0.28	0.68	T.	14	12	8	10	se.	E. G. Kinsell.
Keedysville	do	400	8	55.4	.....	83	12	26	4	45	2.47	.....	0.52	T.	15	12	6	12	s.	J. A. Miller.
Lake Montebello	Baltimore	200	3	53.8	.....	79	6	27	4	39	2.22	.....	0.49	0	11	15	3	12	se.	M. L. Dobler.
Laurel	Prince Georges	150	18	54.8	+ 2.2	79†	6	23	4	45	2.12	− 1.04	0.65	0	10	7	20	3	.....	Dr. T. M. Baldwin.
Leonardtown	St. Marys	100	2	57.8	.....	79†	12	28	4	36	1.59	.....	0.35	0	9	14	7	9	sw.	Brother Fidelis.
Monrovia	Frederick	630	25	54.3	+ 2.9	80	12	27	4	38	2.64	− 0.58	0.87	0	13	11	7	12	s.	J. H. Lawson.

TABLE 1.—*Climatological data for April, 1912. District No. 1*—Continued.

Stations	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
***Maryland*—Continued.**																				
Pocomoke City	Worcester	37	19	57.8[a]	+ 3.2	79	12	32	4	33[a]	2.17	− 1.06	0.45	0	10	17	7	6	sw.	Hon. R. M. Stevenson.
Porto Bello	St. Marys	38	7	54.5[a]	.....	78	12	26	9	43[a]	.....	.....	.....	.....	7	12	0	18	se.	Mrs. C. C. Hyatt.
Princess Anne	Somerset	17	19	56.2	+ 3.7	79	15	28	4	35	1.87	− 1.20	0.35	0	9	7	12	11	sw.	J. R. Stewart.
Rockville	Montgomery	421	5	55.5	.....	80	6	28	4	35	2.57	.....	0.52	0	10	15	8	7	.....	Dr. G. E. Lewis.
Salisbury	Wicomico	23	7	57.2	.....	83	16	26	4	37	2.70	.....	0.51	0	14	13	13	4	sw.	W. E. Downing.
Solomons	Calvert	20	21	56.8	+ 3.4	76†	2	32	4	31	1.31	− 1.58	0.46	0	9	7	8	15	sw.	Dr. W. H. Marsh.
State Sanatorium	Frederick	1,460	4	54.6	.....	76	16	30†	4	44	4.03	.....	1.04	0	9	14	2	14	w.	Superintendent.
Sudlersville	Queen Annes	65	13	53.6[a]	+ 0.6	80	15	28	9	38[a]	2.84	− 0.25	0.73	0	14	14	1	15	s.	Henry L. Higman.
Tokoma Park	Montgomery	320	14	53.8	+ 1.7	79†	6	28	4	46	2.41	− 0.83	0.44	0	12	1	20	9	.....	L. M. Mooers.
Taneytown	Carroll	450	13	54.6	+ 3.4	84	6	27	4	39	3.46	+ 0.48	0.75	0	15	11	7	12	sw.	Curtis H. Reid.
Towson	Baltimore	465	4	54.2[a]	.....	80	6	25	4	40[a]	2.81	.....	0.62	T.	12	13	13	4	se.	C. W. E. Treadwell.
Van Bibber	Harford	100	15	52.0	+ 0.8	77	16	26†	4	37	2.74	− 0.67	0.57	0	12	14	7	9	.....	W. B. Ford.
Westernport	Allegany	1,000	18	56.4	+ 6.0	87	15	27	4	48	2.29	− 0.30	0.86	0.5	10	.....	.....	.....	.....	Prof. O. H. Bruce.
Westminster	Carroll	860	19	54.4	+ 5.0	80	16	24	4	39	3.18	− 0.61	0.75	0	11	17	5	8	w.	Prof. G. F. Morelock.
Woodstock	Baltimore	392	38	55.6	+ 3.9	78	15	30	9	41	2.39	− 0.61	0.54	0	10	14	6	10	nw.	Rev. J. F. Dawson, S. J.
Delaware.																				
Delaware City	New Castle	10	10	52.4	.....	76	6	29	4	33	2.94	+ 0.10	0.58	T.	11	15	8	7	ne.	H. Morton Price.
Dover	Kent	40	24	53.8	+ 0.9	78	6	30†	4	39	3.83	+ 0.36	1.50	0	8	7	13	10	s.	W. C. Josting.
Milford	do	20	28	55.3	+ 2.6	80	15	29†	4	36	3.05	− 0.29	0.40	0	13	11	10	9	sw.	C. J. Holzmueller.
Millsboro	Sussex	20	20	54.0	+ 1.9	83	16	27	4	39	2.09	− 1.53	0.82	0	10	15	6	9	se.	Rev. L. W. Wells.
Seaford	do	40	21	55.4	+ 2.9	75†	6	28	4	34	1.78	− 1.74	0.32	0	13	17	7	6	s.	E. B. Brown.
Wilmington	New Castle	85	1	55.0	.....	75†	15	31	4	36	3.28	+ 0.12	0.55	0	12	17	6	7	nw.	A. J. Taylor.
District of Columbia.																				
Washington	Dist. of Columbia.	112	42	55.6	+ 2.5	81	12	31	4	36	2.33	− 0.92	0.63	0	12	9	6	15	s.	U. S. Weather Bureau.
Virginia.																				
Culpeper	Culpeper	450	4	56.2	.....	81	12†	27	4	41	1.64	.....	0.42	0	9	9	13	8	s.	Col. H. C. Burrows.
Dale Enterprise	Rockingham	1,350	33	54.1	+ 1.6	80	12	24	4	46	3.52	+ 0.53	1.03	T.	11	7	18	5	sw.	Rev. L. J. Heatwole.
Eastville	Northampton	15	2	59.4	+ 4.6	84	29	35	4†	42	2.98	− 0.63	0.98	0	11	10	16	4	sw.	T. B. Robertson.
Fredericksburg	Spottsylvania	100	23	58.4	+ 3.8	84	12	28	4	40	1.89	− 1.68	0.28	0	12	13	6	11	s.	S. G. Howison.
Lincoln	Loudoun	500	11	56.0	.....	86	2†	26	4	42	2.08	− 1.83	0.43	0	8	12	8	10	nw.	Dr. Geo. Roberts.
Mount Weather	do	1,726	8	50.7	+ 2.3	75	12	27	8	37	2.17	− 0.90	0.45	0	10	7	6	17	nw.	U. S. Weather Bureau.
Onancock	Accomac	20	1	58.3	.....	81	12	30	9	36	2.00	.....	0.85	0	5	14	7	9	se.	S. F. Rogers.
Quantico	Prince William	16	15	56.6	+ 3.0	80	11†	27	4	41	3.63	.....	1.21	0	6	14	7	9	s.	Rich., Fdksbg. & Pot. R. R.
Staunton	Augusta	1,380	20	57.1	+ 1.1	82	12	30	4	39	2.86	− 0.13	0.65	0	11	8	8	14	sw.	Ernest Nothnagel.
Warsaw	Richmond	160	20	58.2	+ 3.6	84	12	28	4	45	1.66	− 1.64	0.50	0	10	2	20	8	s.	C. H. Constable.
Winchester	Frederick	717	1	56.2	.....	81	12	32	8	39	4.18	.....	1.90	0	10	10	6	14	.....	Robert L. Glaize.
Woodstock	Shenandoah	927	16	54.5	+ 1.7	81	16	30	4†	43	2.25	− 0.40	0.54	0	10	12	9	9	w.	Mrs. A. G. Artz.

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain ormelted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 1, North Atlantic States.*

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Maine.																																
Ashland	St. John																															
Bar Harbor	Coast	T.	.70	.80		.05			.15						T.				.80	.55	.10		.05	.25				.25	T.			3.70
Cambridge	Kennebec		.02	.30		.02			.38							.15	.15		.30				.83	.15				.01			2.40
Cornish	Saco		.50	.50		.04		.19		T.					.11	.10	T.		.60	.21			.23						.15			2.63
Danforth	Penobscot		.20	.60					.18							T.	.10		T.	.70	.10		T.	.60				T.				2.48
Eastport	Coast		.28	.50		.16			.20						T.	.01	.01		.35	.35	.01		.09	.78				.32				3.06
Eustis	Kennebec	T.	.13	.35	T.		.01	.01	.37	.01					T.	.21		T.	.31	.05	.02		T.	.57	T.			T.	T.			2.04
Fairfield	....do		.31	.30			.08									.14			*	.48				.44				.15				1.90
Farmington	....do		.45	.38				T.	.48						.05	.17	.10		.12	.18			.20	.65				.07				2.91
Gardiner	....do		.40	.34		.03			.23							.09	.01		.30	.88			.12	.72		.05		.14				3.36
Greenville	....do		.43	.30		T.	T.	.30	.05						.02	.24			.58	.15			.52	.20				.08	T.			2.87
Houlton	St. John				.15				.20							.30				.90				.30					.10			1.95
Howe Brook	Penobscot	.20		.30				.20	.15							.35				.45	.20		.20	.30				T.				2.47
Lewiston	Androscoggin	.01	.47	.31		.04			.28						T.	.17	.01		.34	.62			.17	.18		.20		.06				2.86
Madison	Kennebec		.39	.38				.61							.09	.22			.40	.09			1.08	.10				.03				3.95
Millinocket	Penobscot	.06	.40	.03		.01		.23							.01	.13			.50	.11			.70	.13			.03					2.34
North Bridgton	Saco		.40	.52		T.			.27						T.	.12			.89				.50			.12		.08				2.90
Oquossoc	Androscoggin		.28	.49				.54							.57									.56								2.44
Orono	Penobscot					.70			.27							.50	.30			.98	.15			.50	.60			.60				4.60
Patten	....do																															
Portland	Coast	.09	1.00		.05		.06	.09							.06	.10	.52		.79	.15			.34	.02		T.		.05				3.49
Presque Isle	St. John																															
Rumford Falls	Androscoggin	.08	.45	.15				.32	.05						.11	.28			.13	.16			.52	.10		T.		.09				2.44
The Forks	Kennebec																															
Winslow	....do		*	.65			.20	.28							.10				.60				*	.60				.06				2.49
New Hampshire.																																
Alstead Center	Connecticut	.06	.67	.05		.11		T.	.30	T.	.21				.03	.08	.03		.23	.48			.03	.19	.20	.03		.06		.09	.21	3.12
Benton	....do		.80	.20	.40			.29						T.					.41	.27			.36	.13			.40					3.26
Bethlehem	....do	.15	.30	.70		.03		.14	.82						.05	.04			.14	.27				.28	T.	.02		.03				2.97
Brookline	Merrimack			1.18		.02		.30	T.	.22			T.		.20	.10			.05	.15			.30							.45		3.57
Concord	....do	.09	.07	.37		.13	T.	.21	T.	.25			T.		.01	.04	.17		.27	.14			.08	T.	.01			.01		.13		2.58
Durham	....do			.38	.10				.16						.09					.01			.20					.23				1.23
Franklin	....do	T.	.80	.44		.09			.08	.04	.12				.15	.10	.02		.29	.51			.14	.15	.02			.10			.03	3.08
Grafton	....do		.60	.50				.18			.10				.05	.04			.19	.50			.01	.18	T.	.02		.01		T.		2.38
Hanover	Connecticut	T.	.59	.10		.09		.28	.04	.14	T.				.05	.07			.23	.50			.28	.05	T.			.03				2.51
Keene	....do	.02	.87	.37		.08		.15	.20	.07	.08				.14	T.	.12		.14	.26			.05	.10	T.			.03		.20	.11	3.05
Nashua	Merrimack																															
Newton	....do		.80	.27		.08		.29	T.	.23					.03	T.	.25		.73	.20			.13	.14	T.			T.		.30		3.45
Plymouth	....do	.12	.54	.43		.17			.31		.08				.04	.07	T.		.25	.37			.09	.38				.10				3.01
Vermont.																																
Bloomfield	Connecticut	.13	.19	.24		.02			.75							.11	.02		.20	.20	.08			.78		.02		.03				2.77
Cavendish	....do	.12	.07	.37				.28	T.		.28					.12			.20	.20				.15	.07			T.		T.	.03	1.89
Chelsea	....do																															
Manchester	Hudson			.31	.29			.11								T.			T.	T.										T.		0.71
Somerset	Connecticut	.44	.88	.44					.40	.18			T.		.07	.10			.25	.37			.10	.44	.06					.10	.20	4.03
St. Johnsbury	....do	.10	.32	.40		.05			.94						.08	.20	.11		.38	.25				.29	T.			.02				3.14
Vernon	....do	.27	.04			.01		.24		.12					.10	.10	.06	.01	.18	.18			.09		.10			.02		.48		2.66
Woodstock	....do																															
Massachusetts.																																
Amherst	Connecticut	.23	1.03	.04		.10		.59	.09	.22			.06		.05	.19	.12	T.	.41	.07			.19		.05			.04		.44		3.92
Ashland	Merrimack		*	.84		.04		.50		.04			.05		*	.28	.29		*	1.13			*	.38	.03			.08		.61		4.27
Bakers Bridge	....do		1.20								.72					.40			.75	.48				.32							.35	4.22
Bedford	....do	T.	.72	.37		.12		.22	.24	.04	.01		.05		.11	T.	.29		.51	.20			.14	.21	T.	.07		.10		.24	.13	3.76
Blue Hill	Coast	T.	.68	.15		.06		.01	.48	.01	.04		.06	T.	.26	T.	.05	.15	.53	.18			.22	.29	.07	.03		.20		.44	.14	4.05
Boston	....do	.01	.67	.04		.08		.37	.04	.05			.04		.19	.01	.08	.21	.40	.11			.24	.06	.03			.10		.34		3.07
Chestnut Hill	....do	.20	.66			.08		.51		.09			.03		.27	.07	.11	.28	.40	.12		.17	.19	.04	.05		.10			.44		3.92
Clinton	Merrimack		*	1.34		.12		.55		*	.15		.05		*	.25	.19		*	1.06			*	.16	.04			.08		*	.37	4.36
Concord	....do		.77	.47		.05		T.	.38	.01	.03		.14		.19	.05	.07	.04	.69	.35			.11	.15	T.	.10		.05		.18	.16	3.99
Fall River	Coast		.64	.05		.04		.15	.05	.01	.03		.03		.04	.02	.03	.30	.40	.22			.25	.08	.07			.31	.50	.35		3.57
Fitchburg	Merrimack	T.	.57	.41		.03		.22	.15	.12	T.		.05		.09	.01	.28		.36	.23			.04	.16	.03			T.		.20	.18	3.13
Framingham	....do		*	.87		.03		.45		.05			.07		*	.25	.32		*	1.09			*	.39	.03			.05		*	.52	4.12
Haverhill	....do		.49	.62		.06			.37	*	.20				.02	.03	.02		.24	.58			.08	.14				.02	T.	.01	.29	3.17
Hingham	Coast	.23	.35	.33		.04		.32	T.	.04					.30	T.	T.	.25	.28	.24				.33	.12			.22		.65		3.70
Hyannis	....do		*	.76					.15		.01		.10				.02		.03	.04			.18	.27	.03			.42		*	.70	3.31
Jefferson	Merrimack		*	1.47				.47		.11			.13		*	.27	.37		*	.98			.27		.08			.18		*	.04	4.37
Lake Cochituate	....do		*	.88		.05		.51		.08			.07		*	.31	.20		*	1.13			*	.37	.04			.05		*	.47	4.16
Lawrence	....do	*	*	1.25		.13		.40	T.	.22	T.				.07	.04	.16	T.	*	1.05			.26	T.	T.			.06		.35		3.99
Leominster	....do	.03	.79	.35		T.		.20	.12	.13			.02		.10	.02	.72	T.	.59	.20			.18	.02	T.			.04		.30	.03	3.96
Lowell	....do		*	1.28		.13		.41		.14					.15	.03	.11		.87	.21			.23							.30		3.92
Middleboro	Coast		.65	.02		.05		.23		T.				.05	.12	.02	.06	.43	.19	.25			.21	.12	.07			.32		.50	.35	3.58
Monson	Connecticut																															
Nantucket	Coast		.29	.01		.01		.02	.09	T.	.01		.15	.02	.07	T.	.06	.57	.30	T.			.32	.07	T.	T.		.57	.01	.34	T.	2.91
New Bedford	....do																															
Norfolk	....do			.80		T.			.42	T.	T.			.40					*	1.04									T.	T.	.62	3.28
Plymouth	....do		.70			T.			.25	T.			*	.10	*	.39	.12		*	.76			.08	.22				.40		*	.80	3.82
Princeton	Merrimack		*	1.13				.47		.28			.05		*	.15	.43		*	.79			*	.19				.09		*	.34	3.92
Provincetown	Coast		.36	.62		T.			.14		.06		T.		.41			.42	.30	.28			.24	.33						.08	.72	3.96
Rockport	....do		.70	.60					.10		.12								.20	.10				.40				.40			.35	2.97
Rutland	Connecticut	.25	1.11		T.	.02		.56	T.	.12			.10		.21		.39	.23	.45	.21			.27				.16		.36			4.44
Somerset	Coast		.66	T.		.05		.27		T.			.04		.04		.05	.42	.49	.23			.34	.03	.04			.27		.98		3.91
South Egremont	Housatonic																															
Spot Pond	Coast	.26	.75	.02		.10		.41		.11				.06		.24	.07	.04	.12	.60	.10		.14	.16	.04	.03		.05	.03		.32	3.71
Springfield	Connecticut		.13	1.18		.11		.96	T.	.07			.04		.19		.97	.09	.39	.23			.38			.08		.11		.76		5.69
Sterling	Merrimack		*	1.23					.27	*	.13		T.		*	.19	.47		*	.85			*	.19				T.		*	.36	3.69
Taunton	Coast		*	.98		.10			.30	T.	T.		T.		T.	T.	.40	*	*	1.21			*	.29	*	.04		.46		*	.89	4.67
Turners Falls	Connecticut																															
Westboro	Merrimack	T.		1.00		T.			.37	T.	.05				.37		.35		*	1.15				.32		.03		.03		*	.70	4.37
Williamstown	Hudson	.12	.92			.15		.46		.40			.12		.21		.39	T.	.12	.15			.04	.40	.17					.45	T.	4.12
Winchendon	Connecticut	.03	.60	.35		.05		.25	.18	.07	.09		.04		.11		.36		.35	.17			.14	.06	.09	T.		.07		.28	.15	3.94
Worcester	Coast	T.	.71	T.		.04		.32	.47	.05			.06		.08	.01	.71	.18	.66	.10			.62	.30	.05			.19		.39	.04	4.98
Rhode Island.																																
Block Island	Coast		.46			.01		.34	.02		T.		.03	T.	.05	.01	.01	.81	.41	.05			.30	.03	.04			.61		.66	.01	3.85
Bristol	....do	T.	.75			.03		.25		T.			.10		*	.05	.05	*	*	1.12			*	.11	.25	.10		.26		.91		3.98
Greene	....do		*	.61		.02			.50				.08			.14		*	*	1.16				.67	.01	.10		.22			1.00	4.51

TABLE 2.—*Daily precipitation for April, 1912. District No. 1*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Rhode Island—Con.																																
Hope Valley	Coast		.14	.67		.03		.41		T.		T.			.12		*	*	*	*	*	1.72	.42		T.			.30		.85	.32	4.98
Kingston	do		1.00			.02		.35					.09		.08			.24	.53	.15			.56		.13			.51		.95		4.51
Narragansett Pier	do		.13	1.06		.02		.07	.26	T.	T.		.04	.06	.06	.03		.12	.68	.17			.35	.36	.03	.05		.00		.83	.17	5.09
Pawtucket	do		*	.66		.03			.35		T.					.23	.16	*	*	.92			*	.31	T.			.20		.87		3.73
Providence	do	T.	.64	.02		.02		.26	T.	.01	T.		.03		.11	.01	.19	.32	.27	.35			.24	.04	T.			.15		.94	.01	3.61
Wallum Lake	do																															
Connecticut.																																
Bridgeport	Coast		.23	.15		.02		.53	.05				.02	.02	.04		.01	.20	.63	.36			.28	.05	.09			.38		1.04	.04	4.14
Canton	Connecticut		.53			.09		.51		.05		.06	.04		.24	.24		*	*	1.07			*	.20	.13			.13		.98	T.	4.27
Colchester	Coast		.30	.31		.04		T.	.60	T.		T.	T.	.15	.12		.20		1.00	.25			.40			.33		.21		1.00	.20	5.11
Cream Hill	Housatonic		.56			.17		.44		.30			.19		.09		.39	.13	.37	.12			.09	.13	.21			.08		.97	.08	4.28
Danielson	Coast			.45		.10		.48					.05		T.		.38		*	1.10				.50					.10	.95		4.11
Falls Village	Housatonic	.04	1.02			.09		.88	.01	.05		T.	.15	.05	.02	T.	.30	.04	.64	.30			.12	.08	.25			.10		.80	.05	4.99
Hartford	Connecticut	T.	.51	.03		.05		.40	T.	.04	T.	T.	.03	T.	.19	.01	.28	.28	.65	.06			.15	.03	.06			.09		1.07	T.	3.93
Hawleyville	Housatonic		T.	.22		.02	.06		.37					.05	.08	.02	.10	.06	.56	.51			.07	.09	.18	.07		.20		1.30	.32	4.48
Lake Konomoc	Coast			.70					.56										.70	.75				.60		.15			.18		1.20	4.84
N w Haven	do	T.	.39	T.		T.		.62	T.	T.		T.	.05	.08	.05	.01	.02	.21	.71	.13			.44	.03	.12	T.		.30	T.	1.35	.05	4.56
New London	do		.12	.73				T.	.04				.08			.03		.11	1.08				.35	.21	.18			.40		1.02		4.35
N. Grosvenor Dale	do		.65			.06		.56	T.				.05		.30		.24			1.19			.44		.09			.27			.79	4.64
Norwalk	do		.30					.45										*	*	1.13			*	.30	.10			.36		.90	.08	3.62
Southington	do		.20	.30		T.		.10	.50				T.	.05	.12		.05	.15	.60	.50					.10	T.		.20	.10	.70	.50	4.17
South Manchester	Connecticut	*	.56					.57					.02	*	.24		.04	.06	*	1.38			.23		.05					1.03	T.	4.18
Storrs	Coast		.30					.52		T.							.12	.12	.60				.13	.40					.50	T.	.40	3.09
Torrington	Housatonic	.03	.06	.49		.08			.55		.05			.04	.16	.02	.43		.46	.33			.03	.12	T.	.17		.24	.01	.88	.02	4.17
Voluntown	Coast			.76		.04		*	.48				*	.10	.05		.20	*	*	1.33				.50		.10		1.13		*	1.32	5.01
Wallingford	do	.01	.29			T.		.60		T.			.08	.08	.01	.08		.19	.70			.10	.25		.44		.25	.02		1.30	.05	4.45
Waterbury	Housatonic	.04	.46	T.		.03		*	.53	T.		T.	T.		.17		.13	*	.90	.30			.12		.16			.22		.91	.41	4.38
West Simsbury	Connecticut		.44			.07		.37		.09	T.	T.	.02		.05		.25	*	*	.98			*	.30	.15			.14		.83		3.69
New York.																																
Addison	Susquehanna	.34	.82	.18	T.			.28	T.				.37			.16		T.	.02	.03			.31	.21	.15	.04	.01			1.37	.03	4.32
Albany	Hudson	.12	.78	T.		.05		.59	.02	.24		.02	.04		.14	.12		.01	.25	.17			.21	.03	.07		T.			.45		3.31
Amsterdam	Mohawk	.25	*	1.10		.05		*	.30	.15	.05	T.	.15		.30	.10			.12	.20			T.	.12	.08					*	.35	3.32
Athens	Hudson		.96			.10		.52	.08	.10		T.	.02		T.	T.	.96	T.	.35	.13			.04	.14	.18			.02		.64		4.24
Bainbridge ‖	Susquehanna		.58	.34							T.		.09	.23	T.	T.	.56	.18	.39	.28			.38	.05	.05				.15	.63		3.91
Ballston Lake	Hudson	.12	*	.94		.12		*	.34	.15	.01	T.	.09		.18	.12	.01	T.	.12	.17			T.	.12	.08			.01		.30	.05	2.93
Bedford	Coast		.20	.24		T.		.45	.15	.03			T.	.04	.07		.05	.08	.71	.22			.10	.21	.14			.12		1.14	.11	4.06
Beerston	Hudson		.82	.21				.76		.07	.04		.33				.93	.02	.48	.60			.16	.22	.28			.16		.50		5.58
Binghamton	Susquehanna	.23	.90		T.	.01		.28	.04	.04		T.	.40		.01	.49	.02	.12	.47	.06			.16	.06	.13		T.			.76	.01	4.19
Blue Ridge	Hudson																															
Bouckville	Susquehanna	.52	.50	.40		.32		.44	.80	.30	.11	.08	.15		.02				.19	.24			.15	.26	.09					.43	.10	5.10
Carmel ‖	Hudson		.04	.37				.52							.07	.05	.06		.22	.47	.02		.04	.09		.26		.24		.11	1.43	3.99
Chatham	do	T.	.78	.34		.08		.37	.36	.12	.04	T.	.01		T.	T.	.93	T.	.22	.15			T.	.24	.17	.15				.51	.05	4.52
Cooperstown	Susquehanna	.24	.90		.11			.74		.40		.10	.06			.16	.03	.19	.24				.31	.02			.07			.24		3.81
Corinth ‖	Hudson	.18	.50	.55		.05			.24		.15					.35	.20		.18	.68				.56					.40			4.04
Cortland	Susquehanna	.47	.90	.30				T.	T.	.40		.14	.12			.04				.20			.02	.15	.07			.02		.40	.26	3.49
Cutchogue	Coast		.25	1.02				.20	.11				.02	.09	.10			.25	1.87	.35		.11	.21		.13			.51		.83	.03	6.06
De Ruyter	Susquehanna	.18	.61	.30				.46	.12	.14		.11	.06			.06	T.		.12	.09			.15		.10				*	.36	.02	2.88
Elmira ‖	do		*	1.00				*	.28	T.			*	.21		.04	.13	.10	.04	.10				.40	.09		T.			*	.72	3.11
Ephratah	Mohawk		.40	.40		.01		.04	T.	.23		.01	.01		.04	.01			.45	.30			.05	.35	.10		.25			.25	.15	3.05
Glens Falls	Hudson	*	.50	.58			.05	.14	.22	.10	.10				.15	.20			.24	.42			.08	.26	.08					.10	.12	3.34
Gloversville	Mohawk	.38	1.10	.30		.18		.26	.04	.32			.04		.08	.14			.46	.16			.14	.36	.20					.30	.18	4.64
Greene	Susquehanna																															
Greenfield Center	Hudson	.35	.80			.04		.20	.13	.16					.20	.17			.20	.12			.33		.06					.30		3.06
Greenwich	do	.06	.25	.30		.04		.40	.37	.08	.04				.24	.25			.12	.38			.03	.33	.06					.36	.10	3.41
Griffin Corners	Delaware	T.	1.18	.38		T.		.88	T.	.10		T.	T.		T.	.40	1.80		.50	.43			T.	.58	.08					.70	.15	7.18
Hancock	do																															
Haskinville	Susquehanna	.10	.65	.25	T.			.38	T.				.45			.12			.09				.40	T.	.15					1.10	.10	3.79
Homer	do	.50	.90	.12				.65	.05	.18		.12	T.		T.	.30	T.	T.	.05	.25			.22	.13	.05		.20			.56	T.	4.28
Hoosick Falls ‖	Hudson	.12	.26	.74		.12			.90		.12			.03	.05	.04	.02		.12	.23	.05			.25	.12	.18		.08			.31	3.74
Indian Lake	do	.12	.10	.20				.15		.30	.06				.10	.30	.10		.30	.30			.25	.70	.10					.10	.02	3.20
Jeffersonville	Delaware	T.	1.15	T.		.02		.42	T.	T.		T.	.10	T.		1.18	.11	.07	.56	.18			.13	T.	.14		T.	.29		1.13	.13	4.61
Knowelhurst	Hudson																															
Liberty	Delaware		.70	.25				.50	T.							.90	.49	.80					.15	.30	1.20		.43	.15		1.25	.20	7.41
Little Falls	Mohawk	.05	.68	.08		.05		.62	T.	.30			.14		.05	.10			.12	.20			.12	.20	.24					.23		3.18
Mechanicsville ‖	Hudson	.25	.62		.30			.55		.30		T.	.07	.12	.03	.16		.17	.27				.24	T.	.21		.04			.38		3.71
Mohonk Lake	do		*	1.14				.36	T.	T.			.10		.50	.08		*	1.27					.16	.05			.20	*	*	1.09	4.95
Morehouseville	Mohawk	.42	.55						.73	.26					.15	.25	.10		.42	.50			.65	.68	.21							4.92
Morrisville	do	.41	.60	.80		.30		.70	.40	.40			.30		.05				.15	.15			.10	.20	.11					.60		5.27
Mount Hope	Coast								.40					.15	.20			.30	.50	.20			.50					.40		.35	.20	3.20
Newark Valley	Susquehanna	.45	.97					.43	.42	.10		T.	.42		.02	.22	.52		.21	.15			.44	.08	.14		T.			.83	.04	5.44
New Berlin ‖	do	.41	.38	.69					.58	T.			.30	T.		.04	.05	.04		.15	.32			.58							T.	.71	4.25
Newcomb	Hudson																															
New Lisbon	Susquehanna	.40	.90	.07		.05		.51	T.	.23			.20			.16	.02		.27	.20			.13	.33	.07	.03	.03			.65	.02	4.27
New York City	Coast	T.	.37			.01		.23	.01		T.		.14	.14	T.	T.	.06	.56	.78	.31		T.	.06	.08	.03		T.	.31		.42	.19	3.61
North Creek	Hudson	.25	*	.25				.24		.25					.25	.12			*	.73			.78						.23			3.10
Northville ‖	do	.56	.54					.21	.12						.25			.28	.48				.59				.10			.30		3.43
Norwich	Susquehanna																															
Oneonta	do	.26	.76	.14		.01		.46	.05	.14		.05	.14			.17	.12		.19	.29			.12	.35	.07					.56	.06	3.94
Oxford	do	.32	.71	.23		T.		.43	.18	.20	T.	.10	.16	T.		.35	.05	T.	.34	.16			.21	.43	.05		T.			.08	.15	4.75
Oyster Bay	Coast		.21	.61				.50					.02		.14			.14	.66	.75				.12	.13			.33		.27	.36	4.24
Port Jervis	Delaware	.07	.59					.39				.01	.03	.06	.06	.02	.20	.08	.87	.12			.02	.06	.17			.15		1.16	.05	4.11
Roslyn ‖	Coast		.02	.80		.01		*	.46				.01	.07	.08	.01	.07		.58	.87			.06	.24		.13			.07		.55	4.03
Salisbury	Mohawk	.74	.18	.26		.12		.42	.12	.27					.16	.18	.11		.64	.28			.50	.46	.28			.18		T.		4.90
Scarsdale	Coast	T.	.40					.50	.10	.10			T.	.20	T.	T.	T.	.25	.50	.10			T.					.05		.50	.25	2.95
Setauket	do		1.80	.05		T.		.50	T.					.09	T.	T.	T.	.90	.50	.35			.14	.06	.19			.52		.76	.09	5.95
Sherburne ‖	Susquehanna	.31	.33	.79					.45	T.	.24		T.	.08		T.	T.	T.	.12	.22	T.			.50	T.				T.		T.	.56	3.60
Southampton	Coast		.20	.37		.01			.34		T.		T.	.10	.08	.01	.02	.47	1.10	.26			.08	.35		.10		.97		.30	.24	5.00
South Edmeston	Susquehanna	.45	.56	.19		.09		.56	.07	.26		.06	.10			.13	.02		.18	.24			.13	.47	.18		T.			.52		4.21
Spier Falls	Hudson	.12	.81	.26	T.			.35		.07					.23	.19			.27	.35			T.	.39	.07					.14	.18	3.43
Trenton Falls ‖	Mohawk	.20	.25	.28		.03			.28		.31		T.			.13	.05		.18	.19	.03			.82	.10	.15		.18	T.		.31	3.49
Tribeshill ‖	do	.40	.50					.40		.30					.10				.20				.20		.10					.60		2.80
Utica ‖	do	.44	.26	.50					.67		.40				.06	.09	.12		.12	.22	.05		.40			.18					.62	4.13
Wading River	Coast		.21	.63				.10	.52					.07				.31	1.39	.52			.35		.01	.17		.55		.80	.20	5.83
Wappingers Falls	Hudson	T.	.25					.62					.10	.42	T.		.24	.36	.78	.42			.18		.22	T.	.52	.10		1.08	T.	5.29
Warwick	do	.02	.55					.65						.05	.09		.08	.10	.90	.10			.05	.10	.18			.10		1.00	.28	4.25
Waverly	Susquehanna	.25	.95	.15				.27	.01	.01			.15	T.	.03	.42	.07		.14	.12			.03	.20	.15					1.40	.12	4.47
Wells	Hudson																															
West Berne	Mohawk	.23	.47	.60		.54		.29		.40		T.	T.			T.			.60	.54					.09					.40		4.16
West Point	Hudson		*	.40				*	.50					T.	T.	T.		*	.70	.40			*	.20		.40		.09			1.30	3.99
Windham	Mohawk	.37	.58	.52		.32		.38	.18	.20	.13	.08	.15			.18	.72	.40		.28				.26	.20					.62		5.57

TABLE 2.—*Daily precipitation for April, 1912. District No. 1*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Pennsylvania.																																
Altoona	Susquehanna		.27	.06				.19						.26		.16		.03	.65	.05			.02	.20		.08		.28		.40	.45	3.10
Ansonia‖	do	.19	.38	.54				.17	.16					.27	T.		.56		T.					.47		.07				.76	.93	4.50
Bellefonte	do	.23		.31				.40					.32		.11	.19		.80					.29		.12		.19			1.42	.03	4.41
Bethlehem	Lehigh		.16	.25					.38		.01			.15	.11		.07	.30	.65	.52			.03	.15		.06		.20		.46	.17	3.67
Browers Lock	Schuylkill			.72	T.			.22					.25						.90					.09			.16	.20			.70	3.24
Catawissa	Susquehanna	.10	.58					.29					.42	.05		.71	.15	.30	.30				.27		.20		.10			.78	.20	4.45
Center Hall	do	T.	.50					.40					.25	.14	.10	.05	T.	.25	.25				.18		.15		T.	.10		1.00	.35	3.72
Clearfield	do																															
Coatesville	Coast		.60					.43					.04	.19			.21	.24	.14	.11			.12		.20		T.	.29		.38	.37	3.32
Doylestown	Schuylkill		.87					.90						.18				.40					.48					.86		.56	.52	4.77
Drifton	Susquehanna	.35	.57	.40				.65	.05	.02			.85	.13	.25	.10	.50	.30	1.08				.05	T.	.30					1.05	.20	6.85
Emporium	do	.38	.87					.43					.11	.08	.08	.42		T.	T.	T.			.30	.02	.02		T.			1.31	.28	4.30
Ephrata	do		.08	T.				.35						.12			.04	.46	.28	.28			.15		.05			.45		.17	.27	2.70
Everett	Juniata	T.	.65					.22			T.			T.				.88	.51				.19	T.		.18	T.	.69			.51	3.83
Forks of Neshaminy	Delaware		.79					.24						.24				.70	.52	.05			.10	.04	.02		.20	.33		.35	.54	4.12
George School	do		.04	.62				.28	.02			.04		.11	.04		.05	.43	.46	.11			.03	.15	.01	.03		.52		.22	.28	3.44
Gettysburg	Potomac		.18	T.				.28					T.	.26	.04	.06	.10	.35	.36		T.		.06	.02		.10	T.	.63		.30	.37	3.11
Girardville	Susquehanna	.05	.64		T.			.62	T.				.40	.08	.02	.11	.60	.58	1.02				.30		.15		.17	.09		.98	.29	6.10
Gordon	do		.68					.59						.05	.26	.02	.36	.49	.90	.02			.15	.42	.11	.03		.31		.51	.19	5.09
Hamburg	Schuylkill						.29	.47						1.69	.72			2.00					.49					.27		1.00	.38	7.31
Hanover	Susquehanna			.39				.75						.05	.05		.02	.18	.27	.34			.02	.09		.11		.05		.03	.06	2.41
Harrisburg	do	T.	.27	T.	T.			.26			T.		.14	.36	.01	.02		.84	.42				.46		.09		.34	.10		.56	.08	3.95
Huntingdon	Juniata		.47	.14				.26						.23		.70	.04	.25	.45				.13	.06	.23		T.	.42		.57	.57	4.52
Hyndman	Potomac	T.	.60					.07			T.		.05	.10	T.	.20		.75	.05	T.			.36		.35		.76	T.		.17	.19	3.65
Kennett Square	Coast			.33	T.			.21						.08		.35		.24	.41				.04		.05		.13	.18		.48	.10	2.60
Lancaster	Susquehanna		.20	T.				.31			T.		T.	.33		.10	T.	.34	.44				.33		.16		.30	.10		.53	.10	3.24
Lansdale	Schuylkill		.78					.25									.37	.38	.43	.13				.20		.05		.48		.52	.34	3.93
Lawrenceville	Susquehanna	.10	.30	.20				.10	.05			T.	.15							.10					.05					1.40		2.45
Lebanon	do		.34	.01		.01		.35						.05			.60	.56	.40	.02			.30	.12	.10			.41		.43	.33	4.03
Le Roy	do	.20	1.05	.05				.28	.02			.07	.30	.05	.01	.50	.05	.01	.37	.08			.04	.17	.13		.01			1.20	.34	4.93
Lewisburg	do		.60	T.				.33					.41	.06	.09	.50	.11	.21	.49				.42	.01	.10			.06		1.07	.28	4.74
Lloyd	do	.30	.18	.70		T.		.35					.12	.10	.28	.22	.02		.20				T.		.15		.02	.02		.90	.46	4.02
Lock Haven	do	.32	.72	.08	T.	.02		.34					.25	.25	.04	.17	.05	.64					.20		.09		.12			1.12	.29	4.70
Marion	Potomac	T.	.25					.32					T	.28				1.02	.87			.15	.20	.12		.40	.68			.30	.35	4.94
Mauch Chunk	Lehigh	.08	.78					.48						.26	.02	.10	.09	.76	.88	.05			.06	.16	.15			.46		.65	.25	5.23
Mifflintown	Juniata		.75					.17					.06	.20		.32	.24	.32	.55				.31	.09	.30		.04	.35		.47	.29	4.46
Milford	Delaware	.09	.12	.48		.03		.22	.20				.05	.04	.09	.01	.15	.05	.76	.47			.08	.10	.19	.01		.15	.01	1.14	.30	4.74
Montrose	Susquehanna		1.25	.25				.50	.05	.05			.15	.02		.80	1.10		.83	.10			.05	.25	.25	.03		.18		1.30	.15	7.31
Mountain House	Juniata		.55					.27						.12	.10			.95	.90	.30			.17	.37		.18		.59		.42	.10	5.02
Mount Gretna	Susquehanna	T.	.20	T.		T.		.28			T.		.18	.20	.01		.02	1.58	.29	.40			.42		.16		.14	.48		.35	.30	4.75
Muncy Valley	do																															
New Germantown	do																															
Ottsville	Delaware		.10					.24						.16	.04		.07	.39	.50	.21			.07	.13	.10			.38		.35	.50	3.24
Philadelphia (1)	do		.21	T.		T.		.36			.03		.02	.47	T.		.14	.41	.37	.04			.07		.07		.04	.25		.16	.25	2.89
Pocono Lake	do		.37	.30				.73					T.	.18			.30	.28	1.25				.08		.40			.30		1.08	.20	5.47
Point Pleasant	do		.16					.45					.14					1.00	.40	.10			.05	.15				.50		.49	.29	3.64
Pottsville	Schuylkill		.68					.52					.13	.14	.01	.02	.22	.93	1.41				.29	.11	.13		.25	.20		.68	.17	5.89
Reading	do	T.	.15	T.		T.		.70			T.		.04	.26	T.	T.	.03	.30	.67	.03		T.	.17	T.	.10		.07	.21		.41	.25	3.39
Renovo	Susquehanna	.50	.38	.72					.50					.48	T.	.05	.05		.25							.10		.05		.10	.65	3.83
Scranton	do		.67	.02		.01		.57	.01			.02	.12	.14		.17		.26	.46				.15		.15		.02	.01		.93	.07	3.78
Seisholtsville	Schuylkill		.18					.60						.12			.05	.35	.89	.40			.12	.07	.08			.45		.52	.23	4.06
Selinsgrove	Susquehanna	.04	.84	.04				.25					.26	.07		.29	.68	.28	.82				.10		.14			.12		.41	.39	4.73
Shawmont	Schuylkill		.53					.24					.03	.08			.20	.54	.80				.02	.03		.04		.42		.25	.12	3.30
Shippensburg	Susquehanna																															
Smiths Corners	Schuylkill		.18					.54						.13					1.15	.46	.07		.10	.24				.55		.42	.31	4.15
Spring Mount	do		.20					.26	.03					.27			.16	.37	.44	.18			.05	.15	.10			.46		.38	.34	3.39
State College	Susquehanna	.05	.54	.01	T.			.33	T.		T.		.14	.08	T.	.31	.12	.05	.48	T.			.27	.05	.29		.09	.11		.82	.34	4.08
Stroudsburg	Delaware	.05	.15	.36				.35	.08				.01	.10	.02		.13	.32	1.23	.35			.03	.05	.08			.09		.83	.09	4.32
Towanda	Susquehanna	.22	1.13	.03		.02		.30	T.	T.		.04	.26	.02	T.	.52	.05	T.	.48	.05			.02	.18	.12		T.			1.30	.13	4.87
Weikert	do		.68					.45					.27	.14	.14		.67	.20	.45				.55		.15		.15			1.05	.25	5.15
Wellsboro	do	.24	.65				.55					.02	.31	.03		.53			.07				.23	.12						1.37	.26	4.38
West Chester	Coast		.52			.02		.36			.03		.01	.19	.01		.21	.45	.35	.10			.06	.05	.22		.01	.31		.28	.34	3.52
Wilkes-Barre ‖	Susquehanna	.12	.01	.60		.01			.28				.01	.04	.01	.06	.37		.58	.28				.16		.11		.04		.53	.45	3.66
Williamsport ‖	do	.40	.28	.36					.23					.28	.06	.24	T.		.43					.25		.15				.71	.74	4.13
New Jersey.																																
Atlantic City	Coast		.19					.23			T.		.22	.20			.07	.55	.43			.02	.13	.10	T.		T.	.36		.05	.04	2.50
Bayonne	do		.33					.40	T.				.12	.16			.08	.38	.92	.56			.03	.06	.03			.33		.40	.15	3.95
Belvidere	Delaware		.98		.38			.51						.18	.17	.02	.10	.45	1.40	.45			.06	.10	.11			.41		.51	.19	6.02
Boonton	Passaic			.33					.42	T.				.03	.10	.06	.03		.58	.66				.26		.14		.08	.06	.01	.56	3.32
Bridgeton	Coast		.42					.25						T.	.05		T.	.93	.66			T.	.18	.18			T.	.22		.08	.05	3.02
Burlington	Delaware		.54					.27					.04	.10			.06	.30	.48				.07		.03		.08	.27		.37	.06	2.67
Cape May City	Coast		.32					.45			T.		.05	.07	T.		.02	.28	.22		.03		.10	.04				.16		.04	.03	1.81
Charlotteburg	Passaic	T.	.45		T.			.50						.15	.16			*	*	1.31				.22	.15			.16		*		.83	3.93
Chatham	do		.05	.35					.38					.10	.15	.05	.05		.35	.70			.05	.15		.10		.10	.30	T.	.40	3.28
Culvers Lake	Delaware	T.	.35	T.		T.		.39	.08			T.	.01	.03	.06	.01	.08	.10	.99	.50			.06	.20	.10			.18		.92	.16	4.22
Dover	Passaic		.42	T.		.01		.53	T.						.26	.04		*	1.29				.23		.20			.15		*	.68	3.81
Flemington	Coast		.19					.45			T.			.09	.11		.04	.75	.54	.18			.02	.15	.18			.26		.42	.56	3.94
Haddonfield	Delaware		.33	T.				.30			.04			.33	.04	.05	.07	.45	.90	.06			.11		.02			.25		.24	.35	3.54
Hammonton	Coast		.27					.15			T.		.25	.53	T.		.02	.70	1.13			T.	.09	.08				.11		*	.34	3.67
Hightstown	Delaware		.70					.36						.11	.05		.05	.67	.60	.30			.06	.05	.05			.52		.34	.28	4.14
Highwood	Coast	T.	.30					.28	T.					.07	.06		.04	.22	.83	.36			.09	.08	.13			.13		.44	.21	3.24
Imlaystown	Delaware		.38					.30			.03			.28		.03		.14	.90				.09		.01		.09	.47		.28	.05	3.05
Indian Mills	Coast		.70	T.				.24			.04			.43	.03		.07	.41	.59	.05			.11		T.			.17		.15	.17	3.16
Jersey City	do	T.	.30	T.				.26	T.				.11	.11			.05	.58	.70	.22			.09		.02			.25		.53	.07	3.29
Lakewood	do		.20					.22			.02			.27			.05	.65	.84	.04			.05	.01	.03			.20		.20	.11	2.89
Lambertville	Delaware		.62	T.				.29						.04	.20		.08	.45	.80				T.		.20			.60		.33	.30	3.91
Layton	do	.05	.46			.04		.33	.12				.04	.02	.07		.08	.06	.77	.45			.05	.10	.10			.17		.93	.24	4.08
Little Falls	Passaic		.38			T.		.35	T.				.04	.08	.02	T.	.04	.39	.61	.15		T.	.07	.14	.12		T.	.12		.55	.07	3.13
Long Branch	Coast		.33					.31			.05			.11			.15	.83	1.06	.25			.08		.03			.50		.30	.41	4.41
Mahwah	Passaic			.54					.53					.09					.47	.68				.29		.14		.13			.87	3.74
Moorestown	Delaware		.37					.28			.06			.32	.03		.06	.42	.78				.17		.05			.25		.20	.28	3.27
Newark	Passaic		.34					.40					.18	.18	.14	.04		.02	.45	.44	.15		.13		.05			.09		.54	.03	3.18
New Brunswick	Coast		.59					.60						.07	.14		.15	*	1.04		T.		.02	.09				.70		.43	.30	4.13
Newton	Delaware	.03	.57			.05		.76	T.				T.	.18	.04		.02	.46	1.14	.18			.03	.13	.08			.20		.85	.21	4.93
Northfield	Coast		.25					.18						.30	T.		.07	.78	.45				.12	.14		T.		.27		.06	.03	2.65
Paterson	Passaic		.30					.30	T.			T.		.03	.05		.03	.13	.68	.46			.06	.10	.10			.07		.42	.23	2.96
Phillipsburg	Delaware	T.	.28					.44					.07	.09	.06	.21	.08	.73	.74	.18			.09	.06	.06		.03	.07		.43	.12	3.74
Plainfield	Coast		.37					.41	T.				.11	.09	.03		T.	.57	.83	.23		T.	.08	.15	.07		.03	.20		.45	.29	3.91
Pleasantville	do		.36					.10						.37				.94	.12			.02	.12	.13				.21		.05	.03	2.45

TABLE 2.—*Daily precipitation for April, 1912. District No. 1*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
New Jersey—Con.																																
Pompton Plains	Passaic			.38					.40					.04	.12	.01	.05	T.	.76	.54			.08	.12		.14		.04	.05	T.	.60	3.39
Somerville	Coast		.31					.22	.08					.11	.23		.08	1.18	.80	.08			.04	.15	.10			.25		.50	.45	4.58
South Orange	do		.30	T.		T.		.45	.01		T.			.18	T.	T.	T.	.30	.46	.05			.09	.06	.03		T.	.23		.54	.07	2.77
Sussex	Hudson	.06	.62					.78					.06		.12		.09	.17	.85	.38			.05	.16	.21			.12		1.08	.26	5.01
Trenton	Delaware		1.02	T.				.37			T.			.07	.04		.05	.22	.72	.09			.02	.12	.01		.12	.43		.21	.28	3.70
Woodbine	Coast		.20					.24						.28	.07		.15	.78	.34				.18	.17				.47		.06	.06	3.07
West Virginia.																																
Bayard	Potomac		.45	.10				.20	.02		T.			.19			.02	T.	.58	.04		T.	.10	.18	.06	T.	T.	.55		.10	.32	3.21
Burlington	do							T.						T.	T.	.40		.10	.20				.25				.85			.20	2.09
Harpers Ferry ‖	do			.12					.32							.60	.42	T.	.28	.10				.32					.22	.10	2.48
Lost City	do	.32	T.					.17						.10	.09	.36	T.	.32					.03			T.	.02		T.	.02	1.43
Martinsburg	do	.05	.07					.18					.08		.20	.30		.40	.10				.20		T.		.53	.15		.20	.03	2.49
Moorefield	do	T.	T.						T.					T.	T.	.19		T.	.75				.13	T.			T.	.15		.25	.19	1.66
Romney ‖	do							T.	T.	*	*	*	*	*	*	*	*	*	.67					T.		.05		.25	.20		.20	1.37
Upper Tract	do		.22					T.	T.					T.	T.	T.	.47	T.	.40				T.					T.		T.	T.	1.09
Maryland.																																
Annapolis	Coast		.10	.22										.55	T.			1.20	T.		T.	.09	.07				.09		.01	.12	2.45
Baltimore	do		.32					.34			T.		.06	.13	T.	.06	.06	.44	.18	.02			.14				.03	.12		.01	.03	1.94
Cambridge	do		.75					.45										.38	.38				.31	.15				.26		.07	.07	2.82
Cheltenham	do		.20	.07				.38	.14					.12			.10	.50	.06	.10			.13	.10			.03	.30			.09	2.32
Chestertown	do			.43				.18	.08		T.			.45	T.		T.	.25	.60	.05			.10	.15						.05	.03	2.37
Chewsville	Potomac	T.	.35	T.				.20					.06		T.	.27	T.	.17	.25				.10		.08		.50	.30		.12	.10	2.50
Clear Spring	do		T.	.10	T.				.22					.13	.23	.05	.35	.04	.50	.20				.22		.06		.54	.18		.55	3.52
Coleman	do		T.	.34				.24					.24				.10	.12	.84				.30					.24		.07	T.	2.58
College Park	do		.11	.56				.47						.31			.16	.60	.53	.05			.07		.16			.12		T.	.14	3.28
Cumberland	do			.15				T.	.04					.10	.02	.10	.25	.05	1.05	.03	.02	.20				.15		.45	.05	T.	.45	3.11
Darlington	Coast			.30				.31						.16	.07			.30	.29	.38			.07	.03		.01		.30		.05	.19	2.46
Denton	do		.16	.06				.38						.27	T.		.11	1.05	.55				.21	.32				.27		.08	.06	3.52
Easton	do		.24					.42						.06			.06	.45	.26				.22	.18				.20		.09	.06	2.24
Emmitsburg	Potomac													.75				.40	.15									.85		.13	.37	2.65
Fallston	Coast		.38	.02				.27			T.		T.	.31	.02		.31	.38	.49	.07			.07	.16	T.	.15	T.	.32		.03	.14	3.12
Frederick	Potomac	T.	.36	T.				.29			T.		T.	.48	.01	.01	.22	.08	.21	.06			.03	.12	T.	T.	T.	.29		.11	.05	2.32
Frostburg	do		.54	.06				.13						.11	.12		.29	.20	.63	T.			.14	.05	.07	.16	.07	.63		.21	.45	3.86
Great Falls	do		.11						.50					.10			.38		.03	.08		.13						.03		.08		1.44
Green Spring Furnace.	do		.17	T.				.16						.43	.07	.04	.07	.26	.32				.18			.15	.55	.13		.18	.14	2.85
Keedysville	do	T.	.13	T.				.45			T.		.01	.35	T.	.22	.08	.12	.30				.08	.06		.04	.02	.52		.05	.04	2.47
Lake Montebello	Coast		.49					.29						.34	T.	T.	.23	.27	.20	.02			.07	.08			T.	.20		T.	.03	2.22
Laurel	do		.07	.33										.65	.02		.20	.48					.10	.03				.16		T.	.08	2.12
Leonardtown	do		.35					.21										.07	.20			T.	.28	.13				.20		.10	.05	1.59
Monrovia	Potomac		.29	.02				.32						.10	.02		.87	.04	.19				.05	.35				.19		.05	.15	2.64
Pocomoke City	Coast		.10	.39				.45			T.				.12		T.	.12	.27			T.	.28					.09		.28	.07	2.17
Princess Anne	do	T.	.25					.33							.11			.17	.35				.20					.10		.32	.04	1.87
Rockville	Potomac			.44				.39						.18			.52	.11	.44				.11	.06				.13			.19	2.57
Salisbury	Coast		.18	.18				.30	.22		.01				.12			.40	.51	.02			.24	.05				.17		.25	.05	2.70
Solomons	do		.21					.15			T.				T.		.02	.46	.09			T.	.15	.10			T.	.10		T.	.03	1.31
State Sanatorium	Potomac	T.						1.04					T.	.46	T.	.43		.49	.20				.06					.82		.23	.30	4.03
Sudlersville	Coast		.06	.29				.28			T.			.28	.02		.03	.50	.73	.04			.10	.17				.22		.04	.08	2.84
Takoma Park	do		T.	.42					.44					.25	.09	.15		.38	.10	.13				.24				.02	.10		.09	2.41
Taneytown	do		.51					.38						.53	.11	.02	.37	.09	.22	.12			.02		.01	.02		.75		.12	.19	3.46
Towson	do		T.	.42				.34						.30	.02		.30	.23	.62	.01			.09			.18		.24		T.	.06	2.81
Van Bibber	do		.52					.35						.21	.05		.34	.57	.21	.03			.06					.28		.04	.09	2.74
Westernport	Potomac				.05				.15						.09		.06	.13	.86				T.				.04	.43		.18	.30	2.29
Westminster	Coast			.75				.30						.36	.17		.15	.22					.32		.02	.18		.44		T.	.27	3.18
Woodstock	do		.02	.42				.28						.19	T.		.54	.20	.12	T.			.05	.32				.25		T.		2.39
Delaware.																																
Delaware City	Coast			.36		T.		.03	.23					.08		T.	.28	.39	.58	.43			T.	T.				.14		.26	.16	2.94
Dover	do		.31					.28						.35			T.	.77	1.50				.07					.40		.15	T.	3.83
Milford	do		.18	.25				T.	.39					.22	.04		.38	.40	.39				.21	.18				.27		.05	.09	3.05
Millsboro	do		.20	.47													.02	.18	.82			.02	.13					.15		.05	.05	2.09
Seaford	do		.17	.20				.32	.05							.05	.01	.10	.32			T.	.17	.04				.26		.03	.06	1.78
Wilmington	do		.38					.32						.21			.14	.24	.44	.24			.55		.01			.24		.17	.34	3.28
District of Columbia.																																
Washington	Dist. of Col.	T.	.63					.51					.12	.03	.01	T.	.03	.38	.20			T.	.18				T.	.15		.01	.08	2.33
Virginia.																																
Culpeper	Rappahannock		.42					.15						.04			.14	.26	.03				.06				.30				.24	1.64
Dale Enterprise	Shenandoah		.41	T.				.10					T.	.43		1.03	.32	.37	.15			.30				T.		.22		.04	.15	3.52
Eastville	Coast		.60					.50							T.		.06		.06	.32	.02	.03	.98					.08		.22	.11	2.98
Fredericksburg	Potomac		.24	.22				.24						T.			.28	.15	.08	.03		T.	.12	.19				.16		.03	.15	1.89
Lincoln	do		.51					.30								.09	.43	.27					.21					.18			.09	2.08
Mount Weather	do		.26	T.				.45					.02	T.		.34	T.	.22	.19				.34				.05	.08		.22		2.17
Onancock	Coast								.85						.20						.36		.45							.14		2.00
Quantico	Potomac		1.11					1.21										.82	.07			T.	.03								.39	3.63
Staunton	Shenandoah	.12	.14					.09						.59		.17	.65	.16					.44				*	.22		.11	.17	2.86
Warsaw	Rappahannock		.18											T.	T.	.03	.02	.25	.50			.02	.32	.04					.25	.05		1.66
Winchester	Potomac		.08					.21						.17	.04	.96	1.90	.08	.30					.11							.33	4.18
Woodstock	Shenandoah		.40					.10						.32	.11		.33	.07	.54				.10	.20			T.			T.	.08	2.25

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures for April, 1912. District No. 1, North Atlantic States.*

Date.	Maine.												Concord, N. H.		Massachusetts.								Providence, R. I.		Connecticut.			
	Eastport.		Greenville.		Orono.		Portland.		Presque Isle.		Rumford Falls.				Amherst.		Boston.		Middleboro.		Nantucket.				Cream Hill.		Hartford.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	38	22	36	13	52	23	39	29	.....	.....	40	23	45	28	51	34	52	36	48	34	44	37	54	35	54	28	54	38
2....	33	30	35	25	40	28	36	32	.....	.....	39	30	36	32	39	32	39	36	47	36	46	38	41	35	48	36	40	36
3....	35	27	33	20	38	31	39	25	.....	.....	38	23	37	24	40	25	45	29	44	33	45	31	43	27	40	28	40	26
4....	37	22	32	14	39	19	40	24	.....	.....	37	22	39	22	44	24	44	27	43	23	41	28	43	24	38	18	43	26
5....	39	26	33	13	41	21	48	28	.....	.....	44	21	66	27	70	28	69	35	57	21	49	31	66	31	56	30	73	32
6....	38	34	52	24	47	28	43	35	.....	.....	54	33	74	39	78	48	71	39	74	38	56	41	76	46	74	40	78	54
7....	44	34	55	31	63	35	48	35	.....	.....	52	34	74	33	70	34	72	36	65	39	55	42	61	40	65	51	69	40
8....	45	22	45	17	64	28	44	26	.....	.....	38	24	39	26	34	27	38	30	55	31	43	31	36	28	51	34	40	29
9....	36	16	30	10	45	16	42	23	.....	.....	38	21	42	24	35	26	40	28	39	26	45	29	41	26	36	28	38	27
10....	44	26	35	9	46	20	44	30	.....	.....	42	24	47	30	50	32	46	34	45	34	43	35	49	34	44	26	49	34
11....	46	29	38	22	51	16	51	31	.....	.....	46	30	50	32	50	30	54	35	54	27	48	35	52	32	48	34	49	34
12....	48	32	38	26	70	27	52	34	.....	.....	48	31	54	30	54	29	59	38	57	27	53	38	56	36	49	34	52	35
13....	47	32	41	20	53	25	48	32	.....	.....	52	26	59	28	64	38	49	41	55	38	44	38	57	42	47	37	58	40
14....	44	32	49	18	57	22	40	30	.....	.....	50	26	42	30	46	40	41	40	48	40	47	40	44	41	50	38	48	41
15....	46	39	40	33	58	37	44	38	.....	.....	44	37	50	39	69	39	56	40	65	41	61	45	58	42	61	40	71	42
16....	57	41	65	37	69	42	73	41	.....	.....	71	38	78	44	76	55	77	56	72	48	55	46	76	48	74	42	76	55
17....	58	37	54	42	70	33	62	49	.....	.....	53	37	64	46	64	49	61	46	65	45	55	44	64	45	65	36	60	48
18....	39	31	44	33	67	33	49	35	.....	.....	42	34	48	35	50	37	47	38	51	40	44	41	46	38	52	40	48	39
19....	44	34	39	32	54	33	43	36	.....	.....	44	37	47	34	51	36	51	37	50	36	46	39	52	36	41	34	51	37
20....	52	36	46	20	54	32	58	36	.....	.....	51	34	58	34	62	36	60	41	61	37	54	39	60	38	54	30	61	38
21....	64	37	57	32	64	27	61	37	.....	.....	62	28	68	28	72	32	72	42	69	32	55	37	69	38	48	32	67	39
22....	48	39	48	33	65	30	49	42	.....	.....	46	33	57	42	58	46	63	43	61	38	57	45	56	45	44	40	59	46
23....	51	39	47	32	67	40	56	42	.....	.....	48	40	55	40	54	40	55	43	58	41	52	42	55	43	42	35	55	39
24....	55	34	48	27	56	32	56	36	.....	.....	52	33	55	37	58	36	59	40	57	35	53	41	56	39	44	35	56	40
25....	58	36	52	28	81	29	60	38	.....	.....	56	37	60	36	64	38	63	44	61	39	57	44	61	43	51	36	62	44
26....	52	39	63	30	71	30	62	42	.....	.....	64	32	68	30	65	31	67	47	65	27	62	44	61	39	59	37	64	38
27....	45	41	55	38	80	44	60	44	.....	.....	61	44	66	45	66	42	65	52	57	47	51	46	61	48	61	41	66	44
28....	44	26	38	18	50	24	51	32	.....	.....	46	30	51	32	58	36	56	38	57	37	50	42	58	39	54	28	56	36
29....	49	30	52	25	70	27	53	39	.....	.....	58	34	57	38	48	36	51	38	57	36	51	39	53	35	44	32	47	37
30....	52	36	57	24	64	29	58	39	.....	.....	61	32	63	37	62	35	50	37	50	33	45	39	52	36	52	34	54	37
Mns..	46.3	32.0	45.2	24.9	58.2	28.7	50.3	34.7	.....	.....	49.2	30.9	55.0	33.4	56.7	35.7	55.7	38.9	56.2	35.3	50.2	38.9	55.2	37.6	51.5	34.5	56.1	38.4

Date.	New Haven, Conn.		New York.												Pennsylvania.												Atlantic City, N. J.	
			Addison.		Albany.		Binghamton.		Indian Lake.		Little Falls.		New York.		Everett.		Harrisburg.		Philadelphia.		Scranton.		State College.		Wellsboro.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	55	37	50	31	44	31	49	33	45	16	43	24	57	39	66	47	58	43	58	45	55	35	59	37	61	31	52	43
2....	43	37	49	30	39	30	46	26	37	26	35	30	49	37	70	49	63	37	69	43	47	30	53	34	49	30	56	46
3....	44	27	35	24	36	26	30	21	31	18	33	20	41	27	54	29	41	31	47	34	35	25	35	27	35	23	49	32
4....	46	25	45	21	42	24	36	20	38	12	38	14	48	27	58	27	57	31	48	32	40	25	54	25	45	22	49	28
5....	68	34	70	34	73	33	70	36	60	30	63	27	70	38	74	32	73	36	71	40	71	35	70	40	68	33	60	42
6....	77	48	80	37	76	51	75	48	65	34	68	42	74	53	80	37	77	50	77	50	78	49	79	54	79	38	56	47
7....	61	42	68	34	66	36	63	27	62	35	65	35	70	38	76	28	63	37	71	40	64	31	66	32	72	39	54	40
8....	43	30	35	30	36	26	31	22	46	20	46	25	38	30	41	32	44	31	46	35	34	26	39	25	40	23	45	34
9....	47	28	66	25	35	27	48	26	28	11	28	20	60	30	69	28	69	36	65	36	64	30	67	29	65	25	53	33
10....	51	36	58	33	40	32	41	33	38	16	38	28	56	39	64	47	59	44	59	42	55	38	58	46	62	34	61	41
11....	51	33	63	28	44	32	44	35	39	17	38	28	58	37	73	28	66	38	62	40	65	34	69	35	69	27	50	36
12....	56	36	54	34	50	27	40	32	51	16	48	28	52	42	80	38	71	47	65	47	63	40	73	42	53	37	50	45
13....	50	42	49	40	59	37	49	39	52	16	53	29	48	41	76	45	52	44	50	43	49	40	52	47	48	38	51	43
14....	51	42	62	43	49	35	56	44	49	23	48	34	48	40	77	50	53	43	53	42	53	43	54	43	52	43	48	43
15....	67	44	72	52	66	46	64	52	50	37	61	42	65	42	78	50	74	48	76	44	70	49	70	49	65	49	60	46
16....	68	49	70	49	76	54	74	47	63	36	67	53	74	54	80	48	76	58	75	59	78	53	79	52	79	46	58	49
17....	59	48	58	40	59	44	54	40	61	32	64	25	65	44	67	47	64	46	64	47	53	45	68	45	57	41	57	45
18....	50	41	66	43	52	43	56	46	57	33	48	36	53	42	57	47	52	46	50	46	53	47	69	45	58	45	47	43
19....	52	38	55	37	50	41	46	36	41	34	45	33	52	42	57	38	51	44	54	42	48	39	58	36	55	36	53	43
20....	59	37	63	25	58	35	56	31	54	24	52	27	57	39	61	31	59	41	60	41	59	36	60	34	62	25	57	37
21....	64	39	72	28	66	34	68	32	62	19	64	30	60	43	63	32	64	44	68	45	69	36	66	35	69	28	56	44
22....	54	46	65	54	60	49	58	52	57	30	58	45	58	48	65	31	60	54	62	52	60	54	59	52	62	49	55	48
23....	55	43	58	33	56	38	52	33	51	35	55	36	57	44	62	36	57	43	62	47	55	36	56	35	58	32	58	47
24....	64	40	62	31	60	38	58	34	40	23	54	30	65	43	67	30	68	41	69	43	64	40	64	39	63	29	63	43
25....	63	43	65	33	62	43	57	38	51	32	57	36	62	45	64	35	63	47	65	48	59	41	66	38	62	33	63	46
26....	63	41	63	35	65	38	60	38	65	21	65	37	60	48	60	41	60	47	64	48	61	43	56	48	61	36	54	49
27....	65	48	69	51	68	40	68	35	60	25	63	44	66	48	69	50	70	52	70	53	68	40	70	51	71	19	61	52
28....	58	37	55	27	56	36	50	30	59	23	48	32	60	37	64	34	60	40	61	40	53	32	59	31	55	28	59	42
29....	49	38	50	34	43	36	42	37	47	25	40	32	52	38	60	37	53	39	55	40	46	38	52	39	46	34	54	43
30....	50	38	60	38	61	40	57	38	61	26	62	39	47	39	52	39	49	39	48	40	52	39	47	37	55	36	46	43
Mns..	56.1	38.9	59.9	35.1	54.9	36.7	53.3	35.4	50.5	24.8	51.6	31.9	57.4	40.5	66.1	38.1	60.9	42.6	61.5	43.5	57.4	38.3	60.9	39.4	59.2	34.6	54.5	42.4

TABLE 3.—*Maximum and minimum temperatures for April, 1912. District No. 1*—Continued.

Date.	New Jersey.								Martinsburg, W. Va.§§		Maryland.								Millsboro, Del.		Washington, D. C.		Virginia.					
	Bridgeton.		Hightstown.		Phillipsburg.		Sussex.				Baltimore.		Darlington.		Frederick.		Westernport.						Fredericksburg.		Staunton.§§		Woodstock.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	64	42	60	40	59	38	58	36	68	45	62	48	60	46	69	45	70	45	59	43	70	50	74	48	74	45	70	49
2....	71	42	52	41	47	37	44	27	60	45	74	43	72	44	77	48	70	44	75	35	74	43	75	58	70	55	77	52
3....	68	34	47	33	43	28	39	29	45	34	47	36	70	33	59	35	62	31	49	36	47	36	74	37	51	35	62	32
4....	52	28	49	24	43	26	48	24	65	28	60	32	59	27	62	30	66	27	58	27	63	31	64	28	64	30	65	30
5....	74	35	75	33	73	32	75	33	76	35	76	43	78	35	78	39	73	31	68	33	77	45	76	44	69	39	74	35
6....	79	45	78	50	79	49	77	47	80	46	80	53	79	47	81	47	86	38	81	50	79	52	80	50	76	51	75	46
7....	72	49	75	48	70	38	69	40	65	47	69	41	68	44	67	45	78	41	73	46	67	39	72	50	60	54	67	45
8....	50	32	48	31	41	30	41	29	49	32	48	36	48	31	50	32	53	30	51	35	49	34	55	33	57	31	53	31
9....	66	28	64	26	66	29	62	26	65	33	71	37	69	29	71	32	71	53	65	29	70	34	69	30	71	35	69	32
10....	62	49	62	49	58	38	58	36	74	38	65	48	.....	.....	65	51	68	50	67	47	66	49	70	55	70	50	67	42
11....	62	30	62	29	65	32	60	35	75	35	70	42	67	32	71	33	78	51	68	34	72	38	73	37	75	36	73	30
12....	69	42	61	39	64	42	60	36	83	35	72	47	66	41	82	42	84	60	65	45	81	45	84	44	82	49	78	38
13....	53	45	50	43	51	41	51	39	61	45	56	47	60	45	72	51	75	47	65	45	59	48	77	53	71	52	66	50
14....	68	43	50	42	49	42	48	40	59	48	60	44	60	43	54	45	57	43	63	43	63	46	66	49	64	50	56	46
15....	78	47	78	42	75	45	73	45	82	49	73	52	77	43	81	53	87	52	79	53	80	57	80	57	80	58	80	50
16....	75	58	80	57	79	56	78	56	81	59	74	60	77	56	81	58	83	52	83	57	75	62	80	61	80	56	81	50
17....	66	47	73	47	65	45	68	46	56	56	64	50	71	52	74	51	75	52	72	52	65	51	75	61	72	58	66	53
18....	51	46	49	45	49	46	49	46	59	50	53	50	66	47	57	48	66	50	53	47	55	51	64	53	77	51	56	50
19....	54	43	52	42	51	41	50	44	52	43	53	45	55	43	53	44	55	40	58	45	54	43	60	42	61	41	56	41
20....	60	35	60	32	61	35	60	36	62	39	60	41	60	33	63	38	67	33	61	34	61	42	61	37	59	41	59	37
21....	69	36	70	35	70	36	69	.....	67	38	66	45	65	38	68	37	69	35	61	41	65	43	65	44	61	38	65	34
22....	60	52	62	50	58	50	61	48	67	46	61	54	68	51	63	54	75	45	65	51	63	55	65	55	68	54	68	54
23....	60	47	58	45	57	42	58	39	59	45	60	48	60	44	62	48	65	42	60	49	61	49	64	49	61	42	64	43
24....	71	41	70	37	68	39	67	35	72	37	72	44	71	37	74	36	68	35	70	39	73	39	72	34	71	36	69	30
25....	68	42	65	38	65	40	63	40	69	40	65	48	65	40	67	40	70	36	68	46	66	48	68	49	72	43	71	35
26....	62	40	66	36	65	39	64	35	63	46	63	51	64	44	65	45	67	47	63	38	66	51	68	45	63	51	61	44
27....	70	52	71	52	65	48	65	51	71	52	69	56	66	60	67	52	71	52	65	48	71	60	70	60	71	53	71	54
28....	65	39	62	36	64	35	61	32	68	39	64	46	64	52	66	38	68	37	69	46	68	44	66	44	70	40	65	36
29....	57	48	56	41	50	37	53	34	58	45	55	43	55	49	58	49	60	49	71	46	59	47	72	49	73	50	74	46
30....	48	41	45	39	48	39	49	37	48	41	47	42	49	48	49	41	56	43	55	44	47	42	68	44	56	54	54	41
Mean	64.1	41.9	61.7	40.1	59.9	39.2	59.3	38.0[a]	65.3	42.4	63.6	45.7	65.1[a]	42.6[a]	66.9	43.6	69.8	43.0	65.3	42.8	66.5	45.8	70.2	46.7	68.3	45.9	67.1	41.9

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 2, SOUTH ATLANTIC AND EAST GULF STATES.

CHARLES F. VON HERRMANN, District Editor.

GENERAL SUMMARY.

The cloudy, rainy, generally disagreeable weather that has characterized the early months of the year 1912 continued to prevail during most of April, especially in the southern portions of the district, but the month was not cold. Over hundreds of square miles of territory in southern Georgia, northern Florida, and in Alabama and Mississippi the rainfall for the month was unusually heavy, causing destructive floods and at several places keeping the rivers above flood stages during the entire month. At Demopolis, on the lower Tombigbee River, the mean stage of the river for April was 53.9 feet, the flood stage being but 35 feet, a record unsurpassed during the past 20 years. However, over most of central and southern Florida, the Carolinas, and Virginia the rainfall was moderate, and in Virginia there was even a considerable deficiency, so that conditions in the northern portion of the district were more pleasant, and favorable for outdoor occupations. The temperature was very uniform during the month and was moderately above normal in practically all portions of the district. This excess resulted from the absence of cool spells of more than a couple of days' duration, the general cloudiness preventing very high day temperatures. Frosts were much less frequent and injurious than is usual in April.

The fluctuations of atmospheric pressure were very considerable during the month, about 8 areas of high pressure and an equal number of low pressure areas having had an immediate influence on the weather in the district. The highest pressure generally occurred on the 4th or 5th in the southern portion of the district, but on the 26th in the northern part, with a maximum of 30.59 inches at Norfolk, Va. The lowest pressures for the month occurred in connection with disturbances that moved from Texas to near the northern border of the district on the 2d and 17th, the minimum being 29.33 inches at Richmond, Va.

In most of the Carolinas and in Virginia conditions were favorable for agricultural operations, and crop prospects improved materially, but in the Gulf States the frequency of rainfall, the soggy condition of the soil, and extensive overflows greatly hindered plowing and planting, and the prospect at the close of April was discouraging.

TEMPERATURE.

The month of April was generally quite warm, and in Florida and Georgia since 1892 it has been surpassed only by April, 1908, which was slightly warmer. There were two very brief periods of cool weather during which the temperature fell below freezing in the northern portions of the district, but as a rule the temperatures during most of the month fluctuated but slightly, the general cloudiness preventing marked daily ranges until near the close of the month. The temperature was above normal in all sections, though Pensacola, Fla., reported just normal. The excess for the month reached about 5° on the southeastern coast of Florida and on the coasts of North Carolina and Virginia, thence diminishing slowly toward the west. The average temperature for the entire district was 64.9°, or 2.6° above normal, and the State means ranged from 59.2° for the Virginia area to 72.8° for Florida. Monthly means above 70° at individual stations occurred only in Florida and the adjoining portions of Georgia, while as a rule they ranged over most of the remaining portions of the district between 60° and 70°, falling below 60° at a comparatively few points in western North Carolina and western Virginia. The highest monthly mean was 79.2° at Key West, Fla., and the lowest 51.1° at Hot Springs, Va., the two stations that mark the extreme southern and northern limits of the district.

The month opened quite warm, but a marked decline in temperature followed immediately and the 3d and 4th were generally the coldest days throughout the district. During this period minimum temperatures below freezing occurred well into the tidewater region of Virginia, in central and northern North Carolina and in extreme northern Georgia, with a minimum for the district of 19° on the 4th at Hot Springs, Va. On account of the very backward state of vegetation killing frosts on these dates did very little damage. The weather was also cool on various dates from the 7th to 10th, with light frosts, and light frosts formed later in the month but were quite harmless. During most of the month the temperature was uniformly moderately above normal, with the warmest weather from the 11th to 17th and 25th to 30th. The highest temperatures were near 90° over most of the district, rising to 96° in Florida, and occurred on various dates, mainly the 12th, 15th, and 27th to 30th.

PRECIPITATION.

The most striking feature with reference to the distribution of rainfall is the remarkably large amounts that were received in southwestern Georgia and the adjacent portions of Florida, in central and western Alabama, and in the eastern portion of the Mississippi area, where the total amounts for April ranged from 10 to 20 inches at no less than 60 stations. Such heavy rains are almost unprecedented in April, and at several stations it was the wettest April since the establishment of the stations in 1871 or 1872. The State average for the Mississippi area is 11.35 inches; for Alabama, 10.28, and for Georgia, 7.21 inches, and the respective departures +6.94, +6.32, and +3.66 inches. The effect of these excessive rains was destructive to soil and crops; they kept the rivers extremely high, with consequent flooding of immense

areas of lowlands, damage to bridges, roads, etc., and greatly hindered outdoor work of all kinds, especially plowing and planting. On the other hand, in the Carolinas and Virginia the rainfall was more moderate; it was normal in North Carolina and considerably below normal in Virginia. In these States there was ample sunshine, the rains were beneficial, and although vegetation was checked in growth during the first decade, the month as a whole was favorable for outdoor occupations, for preparation of the soil and planting, and for the growth of vegetation.

Scattered and generally light showers fell from the 1st to 3d, and 7th to 8th in most sections, the weather then remaining fair until the 10th in Alabama and Mississippi, and to the 13th in other portions of the district. A long period of frequent and often excessive rains then followed, lasting until the 23d, and showers again fell from the 26th to 30th. The heaviest local rains occurred on the 12th–13th, 15th–17th, and 20th–21st, with maximum amounts of 4 inches or more in 24 hours at a large number of stations. In Mississippi the maximum 24-hourly rainfall was 5.60 inches at Leaksville on the 20th–21st; in Alabama, 5.10 inches at Daphne on the 17th. At Montgomery, Ala., 8.46 inches fell from the 14th to the 17th, and 5.30 inches more from the 20th to 22d, inclusive. In Georgia the maximum amount was 5.30 inches at Bainbridge on the 20th–21st, and on the same day 9.50 inches fell at Blountstown, Fla.

The average rainfall for the entire district was 6.26 inches, and the departure +2.77. The smallest amounts of rain fell in central-southern Florida, where 5 stations received less than 1 inch, with the minimum 0.20 inch at Fort Myers, Fla.

MISCELLANEOUS PHENOMENA.

The prevailing winds for the month were from the southwest in the States from Georgia northward to Virginia, from the east in Florida, and from the south in Alabama and Mississippi. The wind movement was considerable, and high winds and severe local storms were frequent during the month. The average hourly velocity exceeded 10 miles at all the coast stations and at Atlanta, Ga. The highest velocities reported were: Charleston, S. C., 67 miles from the southeast on the 20th; Savannah, Ga., 53 miles west on the 23d; Hatteras, N. C., 60 miles, south on the 22d; and Pensacola, Fla., 56 miles south on the 17th. The number of clear days for the district averaged 13, partly cloudy days 8, cloudy days 9, and days with appreciable rainfall 10. Thunderstorms were frequent, many of them violent and accompanied by heavy hail.

SEVERE LOCAL STORMS.

The following are the most severe local storms reported:

Virginia.—Richmond: On the afternoon of the 18th two thunderstorms occurred, both accompanied by hail, the second being the severest hailstorm that has occurred in this vicinity for many years. No damage of consequence was reported, although the hail fell with great force, some stones having a diameter of nearly an inch and a half. The temperature fluctuated rapidly during the storm, as shown by the following striking record: At 2.15 p. m., temperature 65°; at 3.10 p. m., 73°; at 4 p. m., 55°; and at 5.10 p. m., 67°.

North Carolina.—Near Rocky Mount, Nash County: A severe thunderstorm with high winds on the 22d. Telephone and telegraph wires were blown down, many trees uprooted, and several small houses unroofed

South Carolina.—St. George and Aiken: Severe windstorm occurred at these places on the 22d, injuring a number of people and killing two.

Charleston (Mr. J. H. Scott, local forecaster): A local storm of great severity and suddenness occurred at Charleston about 5 p. m. on April 20, 1912. Moderately heavy rains occurred during the afternoon. Just as the storm began and the wind increased in force, the barometer fell rapidly 0.32 inch in about as many minutes to a reduced reading of 29.78 inches at 5.20 p. m., the time of maximum wind velocity, which was followed by an abrupt rise of 0.18 inch. At about 4.50 p. m. the wind shifted to the southeast, increased rapidly in velocity, attaining 56 miles an hour at 5 p. m. and a maximum of 67 miles from the southeast at 5.21 p. m.; it decreased rapidly to ordinary velocities at 5.40 p. m. The only damage of much importance occurred at the pier of the Carolina Yacht Club, where the yacht *Geisha*, 65 feet in length, was totally wrecked, entailing a loss of about $7,000. Several other vessels received minor injuries. At the Union Depot a 65-foot smokestack was blown down and the roof of the car shed was damaged. The total loss in the city did not exceed $10,000.

Georgia.—During the afternoon of the 22d or early morning of the 23d numerous severe local storms occurred in Georgia, with considerable damage to property and some loss of life at many small towns in the State. Probably the most severe was that which occurred near Newborn, Ga., passing through Jasper, Newton, and Morgan Counties and laying waste a tract some three-quarters of a mile wide and 25 miles long. Six persons lost their lives, much stock was killed, and many houses destroyed.

Similar disturbances, but without loss of life, were reported at many other places, as Newnan, McDonough, Bowden, Cedartown, Fayetteville, Athens, Canton, and others.

Florida.—Fernandina: At about 2 p. m. April 20 a severe thunderstorm occurred, doing considerable damage to vessels in the harbor; loss about $750.

Alabama.—Montgomery: The heavy rain at Montgomery on the night of the 14th did considerable damage in and about the city, chiefly to streets and sidewalks. Hail nearly half an inch in diameter fell from 7.38 to 7.41 p. m. Destructive windstorms occurred in Butler County, near Sandy Grove, and in Jefferson County, causing a loss of about $25,000.

Mississippi.—Severe thunderstorms with hail occurred at several places on April 28. One man was killed by lightning near Suffolk, Franklin County.

THE FLOODS OF APRIL, 1912, IN THE GULF STATES.

All the rivers in the district maintained stages considerably above the normal, but no serious floods occurred in any of the rivers of Virginia or North Carolina. The Roanoke was above the flood stage at Weldon, N. C. on the 1st, but then rapidly declined, and the Neuse slightly exceeded flood stages at Neuse and Smithfield, N. C., on the 24th or 25th, without any damage. In South Carolina very moderate floods occurred in the upper Pedee and in the Wateree Rivers, for which suitable warnings were issued. The Pedee reached a crest stage of 28.1 feet at Cheraw, S. C. on the 24th, and the Wateree was slightly above flood stage at Camden on the same date.

Georgia.—The Altamaha (W. A. Mitchell, local forecaster, Macon): Heavy rains fell over the watershed of the Altamaha system in central Georgia from the 10th to 22d and flood warnings were issued for both the Ocmulgee and Oconee Rivers on the 21st. The stages attained were slightly higher than expected, the maximum stages in the Ocmulgee being 17.7 feet at Macon on the 23d, 19.5 feet at Hawkinsville on the 25th, and 17.8 feet at Lumber City on the 26th; the highest stages in the Oconee were 22.1 feet at Milledgeville on the 17th, and 20 feet at Dublin on the 24th. Flood stages continued at Abbeville and Lumber City to the end of the month. No material damage resulted.

The Apalachicola (C. F. von Herrmann, section director, Atlanta): Owing to heavy rains over the lower watershed of the Flint and Chattahoochee Rivers on April 21st, warnings were issued for moderate floods in both rivers, but subsequent reports indicated that higher stages would probably occur, and the warnings were repeated and received wider distribution on April 22, stages higher than occurred during the recent March flood being indicated at Albany, Bainbridge, and Alaga. The stages predicted were 27 feet at Albany (flood stage 20 feet), 30 feet at Bainbridge (flood stage, 22 feet), and 35 feet at Alaga (flood stage, 30 feet). The crest stages attained were: In the Flint River at Albany 30.2 feet on the 24th, and at Bainbridge 33.5 on the 26th, and in the Chattahooche River at Eufaula, Ala., 45 feet on the 23d and at Alaga, Ala., 38.9 feet on the 23d. The failure to correctly estimate the probable river stages on this occasion, when the flood exceeded by 3 feet the estimated stages at all points for which warnings were issued, was due to the failure to receive telegraphic information of unusually heavy rains that had occurred over the counties between the lower courses

of the Flint and Chattahoochee Rivers. Very large 24-hourly amounts fell at Bainbridge, Fort Gaines, Cuthbert, etc., and the rainfall during two or three days exceeded 7 inches over 10 counties.

Considerable damage resulted from this flood; much of the country was inundated, and railroad traffic was suspended. The plant of the Albany Power Co. was temporarily put out of commission by the deflection of Muckafonne Creek into a new channel above the dam. A great many small wagon bridges were washed away and a few iron county bridges. Several dangerous washouts occurred on the railroads in the southern portion of the State. The warnings were beneficial and the loss of property was chiefly of such nature that it could not have been prevented.

Florida.—The Suwanee River (Mr. A. J. Mitchell, Jacksonville): Very heavy rains occurred during three days from April 19 to 22 over that portion of southern Georgia and of northern Florida which comprises the headwaters of the Withlachochee and the Suwanee Rivers. The upper portion of the rivers began to rise on Thursday, April 25, and by Friday an immense volume of water had overspread a large section in southern Georgia and northern Florida. Great loss of property occurred at the town of Ellaville, Madison County, Fla., situated at the junction of the two rivers. Railway tracks were washed away, mills suspended and damaged, bridges destroyed, etc. Many cattle and other live stock were drowned. Thousands of acres of land in corn and cotton were submerged. For a time traffic in Ellaville was carried on by boats. Dowling Park, on the Suwanee south of the confluence of the two rivers, also suffered great loss.

Alabama.—The Alabama River (P. H. Smyth, section director, Montgomery): The floods in this district began with the heavy rains on April 16, and for a week the public was kept informed of probable river stages. On April 18 warnings were issued that the Alabama River would reach 38 feet at Montgomery and 42 feet at Selma. The maximum stages attained on this rise were: Montgomery 38.7 feet, at 3 p. m. on the 20th, and Selma 41.8 feet at 7 a. m. on the 19th. The rivers then began to fall, but the heavy rains of the 19th to 22d necessitated additional warnings, in which the following stages were predicted: Montgomery 44 feet, and Selma between 48 and 49 feet. The crest stage at Montgomery was 43.6 feet on the 24th (flood stage, 35 feet) and at Selma 48.6 feet at 7 a. m. on the 24th (flood stage, 35 feet).

As far as known no material damage occurred that could have been prevented. Much land that had been planted since the March flood was inundated and badly washed. The warnings were of great benefit to the farmers along the river, particularly at places below Montgomery, on account of the unusual height of the river. Stock valued at many thousands of dollars was driven to higher land and saved. Newspapers, in complimentary notices of the value of the river service, estimate that at least $100,000 worth of property was saved by the timely warnings.

The Tombigbee River and tributaries (Mr. Albert Ashenberger, Mobile): The lower Tombigbee continued above flood stage throughout the month, and although the maximum stage at Demopolis, 57.5 feet on April 25, has been exceeded several times in past years, the mean monthly stage for April, 53.9 feet (flood stage, 35 feet), is the highest mean stage in 20 years, and the length of time the river has remained above flood stage, namely, from February 25 to the end of April, surpasses the record for any past year. The Black Warrior, near its confluence with the Tombigbee, continued very high; while at Tuscaloosa, after the rise from March 29 to April 4, the river again rose above flood stage twice during the latter half of April, with crest stages of 55 feet on April 18 and 47.5 feet on the 24th (flood stage, 43 feet).

Suitable warnings were issued during the month and resulted in the saving of much property, especially live stock. The warnings were beneficial to lumbermen. The lowlands for one-half to 2 miles on each side of the river for about 200 miles below Demopolis were covered with water.

Mississippi.—The Pearl and Pascagoula Rivers (Frank Montgomery, observer, Meridian): Owing to the very heavy rains in Mississippi at the close of March and during the middle of April, three flood periods occurred in the Pearl and Pascagoula Rivers in southeastern Mississippi, for which warnings were issued on March 29 and April 13 and 16, 1912. The maximum stages at most important river stations and the number of days during which the river remained in flood are given in the following table:

Name of river station.	Maximum stage recorded.	Date.	Number of days in flood.	
			March.	April.
	Feet.			
Enterprise, Chickasawhay River	27.1	Mar. 30	4	6
Shubuta, Chickasawhay River	34.3	Apr. 2	6	13
Hattiesburg, Leaf River	21.0	Apr. 19	2	7
Merrill, Pascagoula River	26.2	Apr. 22	13	21
Edinburg, Pearl River	24.9	Apr. 19	10	15
Jackson, Pearl River	31.7	Apr. 23	19	30
Columbia, Pearl River	24.7	Apr. 19	0	27
Pearl River, Pearl River	16.9	...do....	26	30

At Jackson, on the Pearl, the river was above flood stage during the entire month, the mean 28 feet being 8 feet above flood stage; at Columbia, flood stage was reached or exceeded every day of the month, except three, the mean 24.7 feet being 3.4 feet above flood stage. Since December 23, 1911 the Pearl has been above flood stages at Pearl River 95 days. At other stations flood stages were reached but few times prior to March.

The most serious damage in the Pearl River watershed above the Louisiana line and in all but the extreme lower portions of the Leaf and Chickasawhay watersheds was the delay in planting, for practically all live stock and other movable property was taken to high ground upon receipt of the warnings. The greatest damage was done in the vicinity of Merrill, on the Pascagoula, and at Pearl River, La., on the lower Pearl. The village of Merrill was entirely overflowed from 2 to 5 feet deep, and 300 families were driven from their homes. The flooded district was 6 miles wide at the village and 10 miles wide a few miles up the river, and averaged 8 miles wide for a distance of over 40 miles. No trains ran on the railroad between Leaf and Bexley for eight days, because of submerged tracks and washouts. Damage to railroad property is estimated at $15,000; to lumber interests, $8,000; live stock drowned, $2,500; and other losses, $2,000.

At Pearl River, La., the whole of Honey Island, which is 7 miles wide and 15 miles long, was submerged, and all lowlands on both sides of the river were flooded. Ten families were driven from their homes. The loss was about $5,000. The losses due to floods throughout the entire district during April probably aggregate $100,000.

TABLE 1.—*Climatological data for April, 1912. District No. 2, South Atlantic and east Gulf States.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Virginia.																				
Arvonia	Buckingham	350	8	59.6	+ 5.0	85	12	28	4	40	1.96	− 0.99	0.41	0	12	10	14	6	sw.	Rev. Plummer F. Jones.
Ashland	Hanover	221	21	59.2	+ 3.3	82	18	30	4†	35	2.09	− 1.72	0.39	0	9	8	16	6	s.	E. L. C. Scott.
Bedford City	Bedford	947	2	60.3	.....	83	12	36	8	38	2.53	.....	0.83	0	7	10	19	1	s.	E. H. Taylor.
Buchanan	Botetourt	820	8	.....	.....	.....	.....	.....	.....	.....	2.42	− 0.11	0.72	0	8	.....	.....	.....	.....	D. D. Booze.
Callaville	Brunswick	250	18	60.6	+ 4.4	84	12†	28	4	39	2.22	− 1.79	1.03	0	9	16	8	6	sw.	F. M. Gage.
Cape Henry	Princess Anne	20	38	60.0	+ 5.4	84	12	39	9	34	2.13	− 1.79	0.89	0	11	12	8	10	sw.	U. S. Weather Bureau.
Charlottesville	Albemarle	800	23	59.0	+ 3.0	84	12	35	4†	36	2.12	− 0.15	0.56	0	12	11	7	12	s.	Leander McCormick Obsy.
Clarksville	Mecklenburg	286	18	.....	.....	.....	.....	.....	.....	.....	3.01	− 0.20	1.00	0	9	.....	.....	.....	.....	J. A. Ligon.
Columbia	Fluvanna	246	14	60.6	+ 5.3	83	12	30	4	40	2.62	− 0.99	0.75	0	7	12	5	13	sw.	Chesapeake & Ohio Ry.
Danville	Pittsylvania	413	12	.....	.....	.....	.....	.....	.....	.....	3.78	− 0.97	1.05	0	12	.....	.....	.....	.....	C. G. Watkins.
Diamond Springs	Princess Anne	25	2	61.4	.....	84	2†	32	9	39	3.03	.....	1.36	0	7	13	10	7	.....	Va. Truck and Exp. Sta.
Hampton	Elizabeth City	5	29	.....	.....	82	29	.....	.....	.....	2.95	− 0.34	1.54	0	8	17	0	13	ss.	Normal and Agr. Institute.
Hot Springs	Bath	2,195	20	51.1	+ 1.5	76	12†	19	4	41	2.90	− 0.25	0.72	T.	12	13	14	3	.....	F. M. Terry.
Lassiter	Goochland	100	2	.....	.....	.....	.....	.....	.....	.....	2.34	.....	0.47	0	7	23	4	7	.....	T. J. Davis.
Lexington	Rockbridge	1,060	35	56.0	+ 3.0	83	12	28	4	41	2.46	− 0.55	0.70	0	11	18	8	4	.....	Virginia Military Institute.
Lynchburg	Campbell	685	41	59.0	+ 3.4	82	12	34	4	37	1.89	− 1.28	0.64	0	10	9	12	9	sw.	U. S. Weather Bureau.
Newport News	Warwick	55	9	60.8	.....	82	12	37	4†	31	2.97	.....	1.53	0	13	12	7	11	sw.	C. W. Ashby.
Norfolk	Norfolk	91	42	61.0	+ 5.0	83	29	39	9	35	2.78	− 1.01	1.20	0	10	12	7	11	s.	U. S. Weather Bureau.
Randolph	Charlotte	334	8	.....	.....	.....	.....	.....	.....	.....	3.87	.....	1.10	0	10	.....	.....	.....	.....	W. J. Abbitt.
Richmond	Henrico	144	33	59.6	+ 2.4	82	12	34	4	34	2.17	− 1.28	0.67	0	10	12	6	12	s.	U. S. Weather Bureau.
Roanoke	Roanoke	907	2	58.5	.....	82	12	32	9	42	2.03	.....	0.68	0	11	14	5	11	nw.	Reese F. Bell.
Rocky Mount	Franklin	1,150	18	58.7	+ 2.0	82	12†	28	4	41	2.05	− 1.38	0.48	0	8	.....	.....	.....	.....	G. W. B. Hale.
Spottsville (near)	Surry	15	24	58.9	+ 4.0	84	15	30	4†	44	3.01	− 1.15	1.20	0	7	14	3	13	sw.	B. W. Jones.
Williamsburg	James City	70	21	61.8	+ 5.2	83	12†	33	4	40	2.20	− 1.97	0.75	0	8	16	9	5	sw.	Eastern State Hospital.
North Carolina.																				
Albemarle	Stanly	700	....	61.8	.....	85	15†	30	4	40	4.33	.....	2.55	0	10	18	6	6	sw.	M. J. Harris.
Beaufort	Carteret	10	11	64.2	+ 3.8	79	25	45	4	21	3.14	− 1.18	0.74	0	9	20	4	6	s.	H. D. Aller.
Belhaven	Beaufort	4	3	63.2	.....	85	29	34	4†	37	1.30	.....	0.70	0	5	17	12	1	s.	A. L. Bell.
Brewers	Wilkes	1,950	15	58.4	+ 4.4	81	12	27	4	44	4.14	− 0.09	0.93	0	14	6	13	11	w.	W. L. Brewer.
Caroleen	Rutherford	806	12	61.5	+ 3.2	83	12	32	4	40	5.08	+ 1.11	2.00	0	10	12	6	12	sw.	S. B. Tanner.
Chalybeate Springs	Harnett	500	6	62.0	.....	87	29	29	4	41	3.70	.....	1.07	0	13	15	9	6	sw.	J. A. Smith.
Chapel Hill	Orange	500	54	61.4	+ 2.6	84	14†	32	4†	36	3.88	+ 0.03	1.53	0	12	18	7	5	sw.	Prof. A. H. Patterson.
Charlotte	Mecklenburg	773	36	61.4	+ 2.1	80	15	39	8	31	3.92	+ 0.48	2.01	0	11	9	7	14	s.	U. S. Weather Bureau.
Chimney Rock	Rutherford	1,150	2	60.8	.....	82	12†	32	4	39	4.59	.....	1.50	0	10	17	10	3	sw.	J. M. Flack.
Durham (near)	Durham	406	3	.....	.....	.....	.....	.....	.....	.....	3.91	.....	1.58	0	11	.....	.....	.....	.....	J. C. Michie.
Eagletown	Northampton	66	7	61.6	.....	85	29	33	4	36	4.20	.....	1.44	0	13	13	12	5	sw.	J. T. Elliott.
Edenton	Chowan	30	18	63.2	+ 5.3	85	2	36	4	33	2.40	− 0.86	1.75	0	5	11	9	10	se.	E. R. Conger.
Elizabeth City	Pasquotank	8	....	64.0	.....	86	29	36	9	39	2.80	.....	1.40	0	6	17	7	6	sw.	W. J. Simmons.
Elizabethtown	Bladen	60	1	.....	.....	.....	.....	.....	.....	.....	3.35	.....	0.96	0	7	.....	.....	.....	.....	J. W. Hall, jr.
Enfield (near)	Halifax	99	1	.....	.....	.....	.....	.....	.....	.....	4.94	.....	1.90	0	7	.....	.....	.....	.....	T. S. Inborden.
Fayetteville	Cumberland	170	25	63.6	+ 3.3	88	29	35	9	37	4.25	+ 0.50	1.65	0	11	15	4	11	s.	Frank Glover.
Globe (near)	Caldwell	1,800	....	57.8	.....	76	12†	30	4†	43	4.99	.....	1.04	0	10	14	1	15	s.	Julius L. Gragg.
Goldsboro	Wayne	102	42	61.3	+ 0.9	85	29	36	9	33	4.12	+ 0.26	1.40	0	9	.....	.....	.....	s.	Mrs. N. B. Taylor.
Gorge (near)	Caldwell	1,358	....	57.0	.....	79	12	26	4	42	3.73	.....	1.05	0	11	9	12	9	sw.	A. J. Bagley.
Graham	Alamance	656	10	.....	.....	.....	.....	.....	.....	.....	4.28	+ 1.15	1.73	0	10	.....	.....	.....	.....	Dr. W. R. Goley.
Greensboro	Guilford	843	31	60.4	+ 2.6	85	15	33	4	36	3.52	+ 0.20	1.72	0	9	.....	.....	.....	sw.	A. H. Horry.
Greenville	Pitt	75	19	.....	.....	.....	.....	.....	.....	.....	2.47	− 1.33	1.12	0	11	.....	.....	.....	.....	R. M. Hearne.
Hatteras	Dare	11	38	63.2	+ 5.2	77	29	44	4	25	2.55	− 1.85	1.01	0	10	13	11	6	sw.	U. S. Weather Bureau.
Henderson	Vance	508	19	61.4	+ 4.9	82	12	35	4	32	3.84	− 0.21	1.15	0	11	11	12	7	sw.	Enoch Powell.
Kings Mountain (near)	Gaston	952	....	62.4	.....	81	30	32	4	37	5.91	.....	2.76	0	11	9	9	12	w.	Rev. C. J. Strang.
Kinston	Lenoir	46	14	64.4	+ 5.4	87	2	35	4†	41	3.85	+ 0.48	1.77	0	11	13	7	10	s.	H. C. V. Peebles.
Lenoir	Caldwell	1,186	39	59.0	+ 2.8	87	12	25	4	46	6.59	+ 3.03	2.00	0	10	20	1	9	e.	G. M. Goforth.
Louisburg	Franklin	375	21	61.6	+ 3.9	83	29	32	4†	37	4.30	+ 0.97	2.20	0	9	16	6	8	se.	T. B. Wilder.
Lumberton	Robeson	102	29	64.3	+ 3.0	90	15	35	9	39	2.13	− 1.69	0.60	0	8	.....	.....	.....	sw.	B. M. Davis.
Manteo	Dare	12	7	61.0	.....	80	29	35	4	28	1.83	.....	1.38	0	8	18	4	8	sw.	U. S. Weather Bureau.
Marion	McDowell	1,425	20	50.8	+ 3.8	81	12	31	4	40	3.99	+ 0.05	1.07	0	13	13	10	7	w.	Sergt. Thomas McGuire.
Middletown	Hyde	4	1	62.1b	.....	80	29	38	4	30	4.04	.....	1.40	0	8	13	15	2	s.	J. S. Mann.
Moncure	Chatham	145	18	61.6	+ 3.6	85	29	28	4	41	3.19	− 0.49	1.39	0	10	11	11	8	sw.	B. J. Utley.
Monroe	Union	586	18	61.4	+ 3.5	84	29	30	4	38	1.89	− 1.56	0.46	0	9	14	5	11	sw.	T. A. Ashcraft.
Morganton	Burke	1,135	25	60.4	+ 3.3	80	12	28	4	41	4.34	+ 0.62	1.35	0	12	16	8	6	se.	J. B. P. Massey.
Mount Airy	Surry	1,048	24	58.6	+ 3.7	81	18	28	9	42	3.56	+ 0.39	0.70	0	9	17	2	11	s.	Prof. A. H. Merritt.
Mount Holly	Gaston	616	15	.....	.....	.....	.....	.....	.....	.....	4.79	+ 2.17	1.78	0	9	.....	.....	.....	.....	J. W. Holland.
Nashville	Nash	190	8	62.3	.....	85	15†	31	4	41	5.13	.....	1.58	0	12	11	4	15	sw.	J. B. Boddie.
Neuse	Wake	266	....	.....	.....	.....	.....	.....	.....	.....	4.01	.....	2.12	0	10	.....	.....	.....	.....	Gaston H. Mooneyham.
Newbern	Craven	12	30	62.4	+ 2.8	85	29	36	4	38	1.98	− 1.64	0.48	0	9	.....	.....	.....	sw.	J. B. Hill.
N. Wilkesboro (near)	Wilkes	1,700	....	59.5	.....	78	12	35	8	31	4.76	.....	0.94	0	9	7	12	11	w.	Dr. Charles A. Willis.
Parkersburg	Sampson	121	....	63.4	.....	86	2†	30	9	49	2.40	.....	0.85	0	7	15	11	4	sw.	E. J. Conway.
Pinehurst	Moore	650	8	59.8	.....	85	29	31	8	40	3.19	.....	0.76	0	10	10	6	14	sw.	General Office.
Pittsboro	Chatham	480	20	62.2	+ 5.0	85	15	28	4	41	.....	.....	.....	0	.....	13	7	10	s.	Mrs. J. F. Alston.
Raleigh	Wake	390	41	62.6	+ 3.6	83	29	39	4	28	3.74	+ 0.27	1.93	0	12	11	7	12	sw.	U. S. Weather Bureau.
Ramseur	Randolph	442	5	61.3	.....	85	15†	29	4	41	3.89	.....	2.00	0	10	19	1	10	sw.	A. H. York.
Randleman	do	810	7	.....	.....	.....	.....	.....	.....	.....	3.19	.....	1.73	0	6	.....	.....	.....	.....	J. R. Walton.
Reidsville	Rockingham	828	13	61.6	+ 6.1	84	15	36	4†	35	3.85	+ 0.95	1.24	0	11	11	2	17	sw.	E. M. Redd.
Rockingham	Richmond	210	17	61.9a	+ 0.8	87	29	32	8	35	2.65	− 0.81	0.75	0	7	.....	.....	.....	.....	H. S. Ledbetter.
Rocky Mount	Nash	105	1	.....	.....	.....	.....	.....	.....	.....	3.04	.....	1.46	0	7	.....	.....	.....	.....	G. P. Womble.
Salem	Forsyth	1,000	17	59.8	+ 3.2	81	15	29	4	36	4.83	+ 1.86	1.30	0	9	.....	.....	.....	.....	Rev. H. E. Rondthaler.
Salisbury	Rowan	760	28	61.3	+ 1.6	82	15	32	9	36	4.61	+ 1.32	2.27	0	7	17	1	12	w.	Miss Thelma Wilkinson.
Saxon	Stokes	900	20	57.7	+ 2.1	83	15	27	4	42	4.15	+ 0.95	0.95	0	9	8	8	14	sw.	R. P. McAnally.
Scotland Neck	Halifax	80	8	60.4	.....	82	29	32	9	35	3.44	.....	0.95	0	10	10	3	17	sw.	J. Y. Savage.
Settle	Iredell	700	16	58.4	+ 1.6	80	12	27	4	40	3.55	+ 0.11	1.38	0	9	10	8	12	sw.	C. H. Smith.
Sloan	Duplin	50	19	63.9b	+ 3.6	84	29†	32	4†	40	1.57	− 1.83	0.40	0	6	18	5	7	s.	D. M. Sholar.
Smithfield	Johnston	151	22	62.6	+ 3.5	87	29	33	4	41	2.69	− 1.31	1.01	0	12	18	4	8	s.	Edwin S. Sanders.
Snow Hill	Greene	80	7	62.8b	.....	87	29	31	4	40	3.15	.....	1.03	0	10	9	13	8	s.	L. J. H. Mewborn.
Southern Pines	Moore	519	22	62.4	+ 1.1	84	29	38	9	32	2.95	− 0.62	0.60	0	11	13	7	10	.....	Mrs. P. H. Beck.
Southport	Brunswick	18	57	64.7	+ 2.7	80	15	40	9	26	2.28	− 0.65	0.65	0	9	13	8	9	sw.	Mrs. C. E. Taylor.
Statesville	Iredell	950	24	61.3	+ 4.6	81	11†	31	4	40	4.16	+ 0.47	1.30	0	10	11	7	12	sw.	D. Matt Thompson.
Tarboro	Edgecombe	50	27	63.5	+ 4.5	88	15†	34	9	41	3.19	− 0.30	1.75	0	10	17	1	12	sw.	E. V. Zoeller.
Tryon	Polk	1,300	....	63.0	.....	83	25	37	3	31	5.92	.....	1.58	0	10	15	2	13	.....	W. T. Lindsey.
Weldon	Halifax	81	40	60.1	+ 2.8	82	12†	34	4†	36	3.71	+ 0.30	1.79	0	11	.....	.....	.....	s.	H. S. S. Cooper.
Willard	Pender	51	4	62.5	.....	86	30	32	4	40	2.33	.....	0.70	0	7	18	6	6	s.	J. H. Jefferies.
Wilmington	New Hanover	52	41	64.2	+ 3.9	81	30	42	9	27	2.73	− 0.13	0.95	0	10	11	12	7	sw.	U. S. Weather Bureau.

TABLE 1.—*Climatological data for April, 1912. District No. 2*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
South Carolina.																				
Aiken	Aiken	565	27	65.2	+ 2.1	85	28	41	9	34	2.77	− 0.32	1.00	0	4	16	10	4	w.	C. E. Carman.
Allendale	Barnwell	186	23	66.0	+ 2.2	90	29	33	9	36	2.50	− 0.24	1.10	0	4	18	1	11	.....	Richard Hiers.
Anderson	Anderson	764	10	63.6	+ 2.9	84	12	39	4†	35	3.74	+ 0.40	1.22	0	10	15	1	14	w.	H. H. Russell.
Batesburg	Lexington	656	23	64.2	+ 2.8	84	12	37	3	37	5.57	+ 2.77	1.68	0	7	14	3	13	nw.	E. J. Hite.
Beaufort	Beaufort	20	25	65.2	0.0	83	30	45	9	25	8.43	+ 6.23	2.41	0	7	10	15	5	se.	Miss Lillian H. Rice.
Blackville	Barnwell	296	22	67.1[a]	+ 3.6	89	28†	38	9	37	4.69	+ 1.59	1.25	0	11	10	8	12	sw.	Miss M. E. Lange.
Blairs	Fairfield	293	6	.....	.....	.....	.....	.....	.....	.....	3.41	.....	0.82	0	11	11	2	17	s.	John R. Ragsdale.
Bowman	Orangeburg	160	10	64.9	+ 1.5	87	29	35	9	41	3.13	− 0.51	1.70	0	8	17	4	9	sw.	B. O. Evans.
Broxton	Hampton	.....	1	.....	.....	.....	.....	.....	.....	.....	7.25	.....	2.10	0	6	16	7	7	.....	Thomas D. Williams.
Calhoun Falls	Abbeville	508	18	.....	.....	.....	.....	.....	.....	.....	5.13	+ 1.62	1.26	0	11	11	14	5	w.	L. M. Parker.
Camden	Kershaw	222	45	65.7	.....	85	29	41	4†	36	3.74	+ 0.65	1.96	0	7	15	2	13	e.	W. C. Brown.
Catawba	York	562	6	.....	.....	.....	.....	.....	.....	.....	2.87	.....	0.85	0	11	13	6	11	s.	James C. Faris.
Chappells	Newberry	402	6	.....	.....	.....	.....	.....	.....	.....	2.72	.....	1.18	0	5	14	0	16	sw.	W. R. Zimmerman.
Charleston	Charleston	48	41	67.0	+ 3.2	88	30	50	9†	18	4.92	+ 1.93	1.71	0	8	8	11	11	s.	U. S. Weather Bureau.
Cheraw	Chesterfield	144	23	62.6	+ 1.8	82	12†	36	9	33	2.64	− 0.27	0.65	0	14	13	5	12	s.	J. H. Powe.
Clemson College	Oconee	850	20	60.3	+ 1.1	78	12	35	4	31	5.78	+ 2.28	2.00	0	11	17	0	13	w.	Prof. John N. Hook.
Columbia	Richland	351	25	65.0	+ 2.2	83	29	40	9	32	2.77	− 0.09	0.61	0	12	9	7	14	sw.	U. S. Weather Bureau.
Conway	Horry	25	19	65.6[b]	+ 3.8	89	29	36	8	42	2.04	− 1.04	0.72	0	6	16	1	13	s.	P. C. Quattlebaum.
Darlington	Darlington	175	16	63.4	.....	85	29†	35	9	38	2.39	− 1.22	0.53	0	14	18	3	9	.....	D. C. McCall.
Dillon	Dillon	100	7	64.5	+ 3.9	87	29	35	9	39	2.33	− 1.21	0.64	0	12	.....	.....	.....	.....	A. E. Rowell.
Edisto	Bamberg	127	24	.....	.....	.....	.....	.....	.....	.....	3.80	.....	1.66	0	8	18	0	12	.....	Nathan Jenkins.
Effingham	Florence	106	19	.....	.....	.....	.....	.....	.....	.....	2.05	− 1.55	0.90	0	7	17	1	12	w.	H. B. McCall.
Ferguson	Berkeley	51	3	65.0	+ 3.4	88	30	38	9	37	3.23	+ 0.55	0.95	0	8	17	2	11	sw.	Dr. J. R. Des Portes.
Florence	Florence	136	23	62.6	+ 0.3	84	11†	37	9	37	2.63	− 0.42	0.54	0	10	18	2	10	sw.	H. K. Gilbert.
Georgetown	Georgetown	12	18	65.6	+ 2.4	83	27	41	5	31	6.91	+ 3.58	1.90	0	10	13	12	5	e.	A. P. Hazard.
Greenville	Greenville	989	19	60.4	+ 3.6	82	12†	32	3	39	8.17	+ 4.69	2.86	0	11	15	1	14	sw.	Spartan Goodlette.
Greenwood	Greenwood	671	23	63.0	+ 3.2	84	13	38	8	36	4.30	+ 1.59	1.50	0	8	16	0	14	w.	M. M. Calhoun.
Heath Springs	Lancaster	568	10	59.0	.....	81	12	35	10†	43	3.10	.....	0.63	0	12	10	9	11	sw.	Charlie Bowers.
Kingstree	Williamsburg	54	23	64.8	+ 2.0	88	29	36	9	39	2.22	− 0.73	0.84	0	8	17	2	11	s.	A. O. Matthews.
Liberty	Pickens	900	17	62.8	+ 3.0	82	30	34	4	35	7.90	+ 3.93	2.40	0	12	16	1	13	sw.	John T. Boggs.
Little Mountain	Newberry	711	18	64.4	+ 2.8	84	12	40	8†	30	3.58	+ 0.01	0.94	0	10	18	4	8	w.	J. M. Sease, M. D.
Meriwether	Edgefield	.....	2	65.0	.....	85	28†	38	5	36	6.15	.....	1.77	0	11	.....	.....	.....	.....	William S. Middleton.
Newberry	Newberry	502	7	64.0	+ 3.0	84	12†	37	8	38	4.49	+ 1.31	1.42	0	12	9	6	15	s.	W. G. Peterson.
Pelzer	Anderson	873	6	.....	.....	.....	.....	.....	.....	.....	5.26	.....	1.40	0	8	16	1	13	w.	J. M. Ward.
Pinopolis	Berkeley	55	18	.....	.....	.....	.....	.....	.....	.....	4.09	+ 1.14	1.00	0	9	.....	.....	.....	nw.	Miss E. P. Ravenel.
St. George	Dorchester	109	23	67.5	+ 4.1	88	29†	45	9	33	3.32	+ 0.13	1.70	0	4	25	0	5	.....	G. F. Lewis.
St. Matthews	Calhoun	209	23	64.2	+ 1.7	85	29	41	9	34	2.53	− 0.97	1.10	0	7	17	0	13	.....	J. S. Wannamaker.
Saluda	Saluda	530	9	69.6	.....	91	30	52	20	30	5.66	.....	1.29	0	8	12	9	9	w.	Mrs. F. V. J. Maxwell.
Santuc	Union	572	16	63.4	+ 3.9	87	25	35	9	42	4.47	+ 1.03	1.18	0	12	9	10	11	sw.	E. W. Jeter.
Smith Mills	Williamsburg	62	16	.....	.....	.....	.....	.....	.....	.....	2.71	− 0.93	0.66	0	9	17	0	13	s.	W. G. Walker.
Society Hill	Darlington	75	14	63.3	+ 2.9	84	29	36	8	39	3.41	+ 0.47	1.01	0	7	12	7	11	sw.	Maj. J. J. Lucas.
Spartanburg	Spartanburg	875	20	60.6	+ 0.9	82	12	34	8	36	5.03	+ 1.85	1.32	0	9	11	1	18	.....	F. P. Robinson.
Summerville	Dorchester	75	14	66.0	+ 3.2	88	30	40	9	35	4.94	+ 1.28	1.28	0	11	9	16	5	sw.	Miss E. H. Gadsden.
Trenton	Edgefield	620	18	65.2	+ 2.3	87	26†	40	8	31	5.09	− 0.34	1.51	0	11	12	14	4	s.	C. A. Long.
Walterboro	Colleton	69	7	67.3	.....	91	28†	36	9	52	5.17	.....	1.49	0	8	13	7	10	.....	J. A. Westerburg.
Winnsboro	Fairfield	545	21	62.6	+ 1.6	82	30	39	6	29	4.01	+ 1.17	0.90	0	9	15	11	4	se.	J. W. Seigler.
Winthrop College	York	690	12	63.4	+ 3.4	83	15	37	8†	34	4.11	+ 1.17	1.38	0	12	16	8	6	sw.	E. R. Rivers.
Yemassee	Hampton	23	16	64.1	+ 1.0	88	30	39	9	35	6.22	+ 3.23	1.94	0	11	15	1	14	.....	J. G. Hutson.
Georgia.																				
Abbeville	Wilcox	180	9	.....	.....	.....	.....	.....	.....	.....	7.50	.....	3.67	0	9	15	1	14	w.	W. H. Calhoun.
Adairsville	Bartow	772	20	61.8[a]	+ 2.2	84	15	34	9	38	5.31	+ 1.42	1.65	0	10	.....	.....	.....	.....	Mrs. R. C. Evins.
Albany	Dougherty	232	25	69.8	+ 3.1	89	16†	45	4†	35	9.76	+ 6.25	3.43	0	11	23	1	6	sw.	George C. Brosnan.
Allapaha	Berrien	293	23	67.6	+ 0.9	86	15†	43	9	32	11.69	+ 8.85	2.37	0	10	12	8	10	se.	J. F. Rice.
Americus	Sumter	362	27	66.5	+ 1.1	87	27	41	8	33	7.36	+ 3.81	3.42	0	9	.....	.....	.....	.....	C. W. Lamar.
Athens	Clarke	694	30	62.6	+ 2.5	83	12	35	4	35	4.84	+ 1.12	1.72	0	11	13	4	13	sw	C. D. Cox.
Atlanta	Fulton	1,218	47	61.9	+ 1.2	80	11	39	3	28	6.65	+ 2.55	1.57	0	13	9	5	16	se.	U. S. Weather Bureau.
Augusta	Richmond	180	66	65.6	+ 1.3	85	29	43	9	30	5.60	+ 2.31	1.78	0	13	7	11	12	se.	Do.
Bainbridge	Decatur	119	20	68.5	+ 0.3	91	28†	40	4	28	11.23	+ 7.38	5.30	0	10	19	3	8	sw.	Mrs. C. O. Wimberley.
Barnesville	Pike	875	3	64.8	.....	85	22	40	8	40	7.63	.....	2.40	0	9	18	7	5	sw.	Prof. C. W. Mobley.
Butler	Taylor	650	11	.....	.....	.....	.....	.....	.....	.....	8.57	+ 3.89	2.75	0	11	20	1	9	s.	Mrs. M. F. Wallace.
Camak	Warren	613	20	65.2	+ 2.4	85	28	39	4	37	5.32	+ 1.94	1.66	0	7	12	1	17	.....	J. A. Chapman.
Canton	Cherokee	894	21	.....	.....	.....	.....	.....	.....	.....	6.55	+ 2.68	1.69	0	11	10	4	16	.....	G. W. Evans.
Carlton	Madison	557	13	.....	.....	.....	.....	.....	.....	.....	3.59	+ 0.40	1.40	0	9	18	2	10	sw.	M. C. Power.
Clayton	Rabun	2,100	18	59.0	+ 3.0	78	12	34	4	31	6.35	+ 0.52	1.45	0	13	14	2	14	w.	A. J. Duncan.
Columbus	Muscogee	262	24	66.0	+ 1.1	90	28	42	9	36	9.14	+ 5.68	3.09	0	13	12	3	15	ne.	A. J. Land.
Covington	Newton	800	20	.....	.....	.....	.....	.....	.....	.....	5.85	+ 1.56	1.30	0	10	11	7	12	e.	Mrs. Sarah E. Cruse.
Cuthbert	Randolph	446	11	.....	.....	.....	.....	.....	.....	.....	12.43	.....	3.58	0	10	.....	.....	.....	.....	Prof. W. McMichael.
Dahlonega	Lumpkin	1,519	20	59.8	+ 1.7	79	12	35	4	34	5.68	+ 1.46	1.62	0	13	5	20	5	sw.	Prof. B. P. Gaillard.
Diamond	Gilmer	2,020	20	60.6[a]	+ 3.7	82	11	33	10	43	10.72	+ 5.48	2.80	0	11	11	8	11	.....	R. A. Kimzey.
Dublin	Laurens	452	18	66.2	.....	87	28†	37	9	41	7.50	+ 4.57	2.89	0	13	16	5	9	sw.	Mrs. M. E. Martin.
Eastman	Dodge	361	20	67.6	+ 1.0	88	16†	45	10	35	7.75	+ 4.89	2.56	0	12	15	5	10	w.	Mrs. H. T. Bohannon.
Eatonton	Putnam	.....	8	.....	.....	.....	.....	38	8†	.....	7.67	.....	.....	0	.....	.....	.....	.....	.....	Prof. W. C. Wright.
Elberton	Elbert	710	20	64.4	+ 2.5	84	11†	39	8	35	4.40	+ 0.86	1.36	0	9	9	15	6	e.	H. A. Roebuck.
Experiment	Spalding	946	12	64.6	+ 3.7	84	16	41	3†	28	7.14	+ 4.07	1.50	0	14	13	11	6	.....	M. V. Calvin.
Fort Gaines	Clay	166	24	67.8	+ 2.4	88	28	41	9	37	9.87	+ 6.30	3.90	0	11	19	0	11	se.	Miss Eva T. Graham.
Gainesville	Hall	1,254	33	59.2	.....	80	12	33	4†	37	5.81	+ 1.94	1.54	0	12	7	10	13	e.	W. C. Walker.
Glennville	Tattnall	.....	7	67.2	.....	89	29	44	4†	32	5.56	.....	1.70	0	10	18	6	6	se.	William C. Barnard.
Gore	Chattooga	.....	13	61.8	+ 3.3	82	12	32	9	42	5.02	+ 0.55	1.55	0	14	12	8	10	s.	H. M. Ponder.
Granite Hill	Hancock	.....	.....	64.8	.....	83	22	42	3	28	7.09	.....	1.71	0	11	15	7	8	w.	George White, jr.
Greensboro	Greene	598	10	63.2	.....	83	11	35	4	34	5.43	.....	1.42	0	9	11	5	14	sw.	R. L. Caldwell.
Griffin	Spalding	975	23	63.9	+ 1.5	86	11†	37	8	35	9.07	+ 5.92	1.62	0	10	14	5	11	.....	J. M. Mathews.
Harrison	Washington	378	13	67.0	+ 4.5	87	28	42	9	38	9.61	+ 6.12	2.90	0	10	10	0	20	s.	C. L. Wood.
Hartwell	Hart	838	2	63.3	.....	85	12	39	4†	36	2.76	.....	1.02	0	7	7	19	4	w.	W. B. McMullan.
Hawkinsville	Pulaski	235	16	67.1[b]	+ 4.0	88	16	43	8	35	6.88	+ 4.64	3.32	0	7	16	2	12	.....	R. H. Wood.
Lisbon	Lincoln	.....	5	64.4	.....	84	12†	36	4†	39	3.74	.....	1.20	0	11	13	5	12	.....	B. J. Du Bose.
Lost Mountain	Cobb	.....	12	62.3	+ 2.4	80	1†	38	4†	32	5.68	+ 2.20	2.00	0	9	1	24	5	w.	A. N. Mayes.
Louisville	Jefferson	259	20	65.8	+ 2.1	87	30	39	9	31	7.22	+ 4.09	1.75	0	9	12	13	5	.....	J. C. Little.
Lumber City	Telfair	150	3	.....	.....	.....	.....	.....	.....	.....	6.89	.....	2.30	0	11	12	5	13	s.	Walter A. Hilton.
Macon	Bibb	370	31	65.5	+ 1.6	84	29	42	9	32	8.14	+ 4.17	2.37	0	13	12	6	12	s.	U. S. Weather Bureau.
Marshallville	Macon	500	19	66.0	+ 1.3	88	29	38	4†	40	10.26	+ 5.77	3.35	0	12	7	9	14	e.	E. C. Bryan.
Milledgeville	Baldwin	276	24	65.0	+ 1.8	86	29	38	9	32	8.30	+ 5.64	2.10	0	11	19	4	7	se.	Prof. O. M. Cone.
Millen	Jenkins	158	24	67.4	+ 3.0	89	29	39	9	39	6.92	+ 4.41	2.20	0	9	16	0	14	se.	M. G. McComb.
Mineral Bluff	Fannin	1,571	.....	58.2	.....	81	12	28	4	44	5.54	.....	1.60	0	13	6	19	5	nw.	J. M. Clement.
Montezuma	Macon	292	7	.....	.....	.....	.....	.....	.....	.....	7.91	.....	2.65	0	12	14	2	14	ne.	J. C. Collins.

TABLE 1.—*Climatological data for April, 1912. District No. 2*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Georgia—Continued.																				
Monticello	Jasper	800	17	64.6	+ 1.3	85	28	39	8	37	7.02	+ 3.81	1.90	0	13	18	0	12		Miss Maude C. Penn.
Newnan	Coweta	959	23	62.6	+ 1.5	81	1†	34	3	33	8.27	+ 4.13	2.20	0	15	15	1	14	nw.	Mrs. Ida J. Milner.
Norcross	Gwinnett	1,078	2								4.21		1.08	0	12	12	4	14		W. O. Medlock.
Point Peter	Oglethorpe	600	23	62.7	+ 3.0	84	12	35	4†	34	2.99	− 0.76	0.80	0	7	13	12	5		C. M. Witcher.
Poulan	Worth	365	21	68.4	+ 3.5	88	16	41	9	36	10.45	+ 7.37	3.30	0	11	18	5	7		C. T. Merritt.
Putnam	Marion		12	65.2	+ 1.6	88	28	36	9	44	9.35	+ 5.51	2.80	0	10	13	6	11	s.	Mrs. J. M. Collum.
Quitman	Brooks	173	26	69.6	+ 2.4	89	12	44	4	31	11.90	+ 8.77	3.67	0	9	19	1	10	ne.	A. B. Jones.
Ramhurst	Murray		19	62.8	+ 3.3	80	12	36	9	33	5.78	+ 1.73	1.36	0	13	11	9	10	sw.	D. E. Humphreys.
Resaca	Gordon	657	18								4.35	+ 0.27	1.20	0	11	12	3	15	sw.	D. A. Norton.
Rome	Floyd	576	53	62.5	+ 1.2	83	11†	36	9	42	6.96	+ 2.76	2.60	0	18	11	3	16	w.	W. M. Towers.
St. George	Charlton		5	69.2		89	16	43	4	43	5.03		1.68	0	8	18	11	1	se.	A. N. Lund.
St. Marys	Camden	20	21	69.0	+ 2.0	90	29	44	4	24	4.39	+ 1.72	1.66	0	9	11	11	8	ne.	David C. Sterling.
Savannah	Chatham	65	61	67.8	+ 1.5	85	30	51	8	21	5.78	+ 3.15	1.69	0	9	10	11	9	se.	U. S. Weather Bureau.
Statesboro	Bulloch	253	12	68.5	+ 3.5	89	28	41	9	41	6.65	+ 3.75	1.85	0	9	16	9	5	s.	W. C. Cromley.
Talbotton	Talbot	750	18	65.9	+ 3.5	88	12	41	3†	37	4.97	+ 0.64	2.14	0	7	8	2	20	sw.	Dr. E. L. Bardwell.
Tallapoosa	Haralson	1,150	13	62.6	+ 2.9	81	28	37	3	41	6.67	+ 2.91	1.35	0	12	7	10	13	s.	Elmer C. Bishop.
Thomasville	Thomas	273	30	68.6	+ 1.7	88	15	43	4	30	10.33	+ 6.92	4.66	0	8	9	12	9	e.	U. S. Weather Bureau.
Tifton	Tift	370	....	68.0*		86	15	45	4	30	10.19		3.40	0	9	....	....	....	w.	J. F. Hart, jr.
Toccoa	Stephens	1,050	26	60.9	+ 0.7	82	12	36	4	35	6.44	+ 1.83	1.90	0	13	13	5	12	e.	Mrs. Alice Starke.
Valdosta	Lowndes	220	7	70.8		93	28	41	4	39	8.35		2.70	0	7	17	1	12	w.	Miss Annie Twitty.
Washington	Wilkes	630	21	64.4	+ 1.2	83	1†	40	8	33	9.37	+ 5.96	2.84	0	14	12	5	13	ne.	Miss Ella B. Smith.
Waycross	Ware	131	23	68.4	+ 1.4	89	15	43	4†	35	9.69	+ 7.31	2.64	0	9	18	3	9	s.	Thomas Sasser.
Waynesboro	Burke	86	20	65.2	+ 1.1	89	26†	35	9	41	6.77	+ 4.44	2.25	0	8	17	5	8	w.	Mrs. H. W. Blount.
West Point	Troup	620	22	64.2	+ 0.9	83	28	39	9	36	8.82	+ 4.73	2.97	0	14	13	0	17	se.	E. N. Dunn.
Woodbury	Meriwether	641	9								6.36		1.81	0	10	19	2	9		E. T. Riggins.
Florida.																				
Apalachicola	Franklin	24	-8	69.2		83	30	45	5	23	5.78		3.60	0	3	14	8	8	s.	G. H. Whiteside.
Arcadia	De Soto	61	11	77.6	+ 6.1	95	21†	53	4	29	0.84	− 0.72	0.40	0	6	14	16	0	w.	C. S. Bushnell.
Archer	Alachua	92	27	72.6	+ 4.4	90	1	45	4	34	1.35	− 1.07	1.35	0	1	....	....	....		R. B. Hodgson.
Bartow	Polk	115	24	74.4	+ 3.0	93	22	52	6	30	1.52	− 0.29	0.48	0	9	11	11	8	ne.	William Hood.
Blountstown	Calhoun		3	69.2		88	15†	43	4	34	17.50		9.50	0	5	....	....	....		C. L. Hobbs.
Bradentown	Manatee	10	28	74.0	+ 3.5	88	26	54	4	24	1.13	− 0.72	0.78	0	4	16	13	1	s.	H. H. Ten Broeck.
Brooksville	Hernando	126	19	73.7	+ 3.8	92	15†	50	4	37	1.64	− 0.58	0.45	0	5	18	9	3	nw.	C. C. Peck.
Carrabelle	Franklin	10	13	70.2	+ 3.3	86	27†	44	4	32	3.70	+ 1.40	2.15	0	5	....	....	....		J. J. Blomquist.
Cedar Keys	Levy	10	23	73.5	+ 4.1	85	28	54	4	25	1.85	− 0.07	0.98	0	2	....	....	....	nw.	J. B. Lutterloh.
Clermont	Lake	105	19	74.5	+ 2.3	95	20	55	4†	33	2.19	+ 0.13	0.75	0	6	10	20	0	e.	S. S. Fesler.
Crescent City	Putnam		14	73.9	+ 5.0	90	16†	57	4†	28	4.14	+ 2.17	1.38	0	8	15	11	4		P. C. Smith.
De Funiak Springs	Walton	193	14	68.2	+ 3.1	87	29†	48	1	30	9.21	+ 6.03	2.80	0	8	....	....	....	s.	R. W. Storrs.
DeLand	Volusia	27	15	71.4*	+ 3.1	90	20†	51	6	32	2.81		0.90	0	9	16	9	5	e.	O. B. Webster.
Eustis	Lake	56	21	73.6	+ 2.7	94	21	46	4	31	2.06	− 0.14	0.50	0	9	17	10	3	e.	C. T. Smith.
Federal Point	Putnam	5	20	71.6	+ 3.6	92	16	48	4	32	3.65	+ 0.77	2.09	0	10	15	13	2	ne.	E. S. Hubbard.
Fenholloway	Taylor	75	5								6.48		3.50	0	5	....	....	....		J. Wigglesworth.
Fernandina	Nassau	10	19	69.6	+ 2.4	88	29	50	4	25	3.47	+ 0.79	0.92	0	11	10	15	5	ne.	W. B. C. Duryee.
Fort Meade	Polk	125	23	75.5	+ 5.5	96	15†	52	4†	34	1.07	− 0.92	0.34	0	4	18	10	2	ne.	G. L. Brodrick.
Fort Myers	Lee	12	40	76.2	+ 3.9	90	20†	58	4†	24	0.20	− 2.09	0.20	0	1	25	5	0	s.	Miss M. M. Gardner.
Fort Pierce	St. Lucie	6	11	76.0	+ 5.1	94	22	63	8†	23	3.40	+ 1.07	2.10	0	7	22	4	4	e.	T. C. Nicholson.
Gainesville	Alachua	176	18	72.0	+ 3.0	89	17	49	4	27	1.42	− 0.69	0.95	0	5	10	11	9	e.	John Schnabel.
Grasmere	Orange	175	14	72.8	+ 2.2	92	22	49	4	30	1.36		0.39	0	7	....	....	....		J. B. Escott.
Hilliard	Nassau	69	3	69.6		89	16	42	9	33	3.12		1.23	0	6	17	8	5		B. A. Tibbits.
Homestead	Dade	5	2	76.4		92	3†	50	7	35	5.03		2.30	0	14	18	10	2	se.	W. J. Krome.
Hypoluxo	Palm Beach	9	16	78.0	+ 5.3	93	23	61	11	25	2.22	− 0.68	1.01	0	7	11	15	4	s.	G. A. Angevine.
Inverness	Citrus	43	12	73.6	+ 4.6	90	27	52	4	27	1.62	− 0.49	0.56	0	4	6	20	4	ne.	W. H. Miller.
Jacksonville	Duval	101	41	70.8	+ 3.2	87	22	51	4	21	4.96	+ 2.24	2.39	0	11	12	13	5	ne.	U. S. Weather Bureau.
Jasper	Hamilton	152	11	70.2	+ 3.6	89	15†	42	4	33	8.42	+ 6.20	2.70	0	7	18	5	7	e.	Mrs. W. C. Caldwell.
Johnstown	Bradford	125	12	72.0*	+ 4.6	89	22†	46	4	....	6.02	+ 4.03	3.00	0	7	18	6	6		A. M. C. Brasch.
Key West	Monroe	14	41	79.2	+ 3.7	87	22	68	5	11	0.25	− 1.05	0.17	0	4	12	18	0	se.	U. S. Weather Bureau.
Kissimmee	Osceola	65	19	76.0	+ 4.7	95	22	53	4	32	1.31	− 0.91	0.45	0	4	2	25	3	ne.	J. A. Simpson.
Lake City	Columbia	210	27	71.3	+ 2.6	90	16	44	4	31	5.73	+ 2.93	1.60	0	6	19	5	6	ne.	W. B. Knight.
Live Oak	Suwanee	109	12	71.6		90	15†	42	4	34	5.19	+ 3.08	2.22	0	5	22	5	3	w.	J. D. Henry.
Macclenny	Baker	125	15	69.4*	+ 2.2	88	28	41	9	....	10.41	+ 7.77	4.57	0	8	....	....	....		Griffing Bros. Co.
Madison	Madison	200	12	70.6	+ 2.7	91	16	46	4	30	11.63	+ 8.90	4.37	0	7	12	4	14	ne.	E. J. Vann.
Malabar	Brevard	24	18	73.6	+ 2.2	94	22	58	6†	28	1.94	+ 0.03	0.62	0	7	21	7	2	sw.	J. F. Farley.
Marianna	Jackson	80	9	68.6	+ 3.2	87	1†	44	4	31	12.59	+ 9.75	6.90	0	10	16	4	10	sw.	W. J. Watson.
Merritts Island	Brevard	20	29	73.8	+ 2.1	87	22†	58	4†	22	2.47	− 0.35	1.06	0	8	0	28	2	se.	F. Ulrich.
Miami	Dade	47	10	77.8	+ 3.6	89	3	63	8	19	5.61	+ 3.02	2.17	0	9	1	18	11	se.	U. S. Weather Bureau.
Middleburg	Clay	10	11	70.3*	+ 3.2	90	16	44	4	32	5.16	+ 1.78	2.00	0	8	....	....	....		G. A. Chalker.
Molino	Escambia	49	10	67.2	+ 1.1	90	30	40	4	37	15.92	+11.27	6.05	0	7	....	....	....	e.	W. H. Trimmer.
Monticello	Jefferson	207	8	70.0		90	28	43	4	36	10.80		3.95	0	8	22	2	6	n.	E. C. Potter.
Mount Pleasant	Gadsden	260	6	67.7		87	28†	41	4	40	9.85		3.50	0	7	5	2	23	s.	Miss Addie Grubb.
New Smyrna	Volusia	9	27	72.8	+ 4.4	93	30	53	6	27	2.37	+ 0.19	0.59	0	10	10	15	5		F. Nordman.
Observation Island	Palm Beach			77.2		93	21	62	9	22	1.07		0.45	0	3	19	0	11	e.	F. K. Armstrong.
Ocala	Marion	98	22	73.7	+ 4.1	90	14†	46	4	31	3.62	+ 1.65	2.15	0	6	9	15	6	sw.	J. C. Caldwell.
Orange City	Volusia	39	18	72.2	+ 2.1	94	22	42	4	33	1.93	+ 0.48	0.60	0	5	21	4	5	se.	J. D. Graham.
Orlando	Orange	111	19	74.4	+ 3.6	92	22	49	4	31	4.30	+ 2.34	1.80	0	9	4	13	13	sw.	James Thomson.
Pensacola	Escambia	149	32	67.5	− 0.2	79	30	50	3	20	11.02	+ 7.86	4.75	0	13	7	4	19	se.	U. S. Weather Bureau.
Pinellas Park	Pinellas	20	1	75.0		91	23	48	5	31	1.42		1.10	0	4	21	6	3	w.	R. H. MaWhinney.
Plant City	Hillsboro	121	18	75.9	+ 5.6	94	15†	52	4	30	1.99	− 0.09	0.71	0	4	14	16	0		E. B. Trask.
Rockledge	Brevard	28	4	74.2		88	17†	58	7	22	2.13		1.10	0	7	8	15	7	w.	J. H. White.
Rockwell	Marion	10	10	73.3*	+ 3.6	90	17†	54	9	31	2.71	+ 0.94	1.66	0	2	....	....	....		Dunellon Phosphate Co.
St. Andrew	Washington	14	15	69.3	+ 2.7	87	19†	44	4	34	9.33	+ 7.24	2.94	0	11	24	3	3	s.	W. A. Emmons.
St. Augustine	St. Johns	10	60	71.4	+ 3.2	91	22	49	4	29	4.56	+ 1.84	2.87	0	6	29	0	1	e.	E. F. Joyce.
St. Leo	Pasco	140	15	73.8	+ 3.1	90	16†	52	4	28	1.10	− 0.96	0.36	0	6	11	16	3	e.	G. Schneider.
Sand Key	Monroe			77.6		87	30	70	5	10	0.35		0.23	0	5	16	13	1	e.	U. S. Weather Bureau.
Satsuma Heights	Putnam	98	4	71.5		92	16	46	4	33	2.86		1.27	0	6	6	22	2	ne.	Satsuma Co.
Switzerland	St. Johns	10	19	70.4*	+ 2.7	88	17	45	4	28	4.62	+ 1.80	2.02	0	7	....	....	....		Mrs. W. C. Steele.
Tallahassee	Leon	192	25	69.6	+ 2.7	86	30	48	4	27	12.91	+ 9.86	5.40	0	8	17	3	10	s.	W. H. Markham.
Tampa	Hillsboro	79	22	74.3	+ 3.7	90	27	54	4	26	1.31	− 0.54	0.88	0	5	10	14	6	ne.	U. S. Weather Bureau.
Tarpon Springs	Pinellas	20	27	74.8	+ 4.7	91	26	50	4	31	1.40	− 0.25	0.55	0	4	24	2	4	w.	A. P. Albaugh.
Titusville	Brevard	16	16	75.0	+ 5.9	94	22	54	6	28	4.39	+ 2.57	1.23	0	15	8	17	5	e.	F. M. Taylor.
Alabama.																				
Alaga	Houston	105	7								8.63		3.65	0	12	....	....	....	s.	James L. Willis.
Anniston	Calhoun	728	21	62.6	+ 2.2	82	28	39	19	35	8.35	+ 4.72	1.39	0	13	10	8	12	se.	U. S. Weather Bureau.
Ashville	St. Clair	685	19	62.8	+ 1.3	81	29	36	9	38	11.29	+ 6.53	2.05	0	13	16	7	7	s.	George R. Cather.

TABLE 1.—*Climatological data for April, 1912. District No. 2*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Alabama—Continued.																				
Auburn	Lee	732	30	65.4	+ 2.3	85	14	40	3	33	10.13	+ 6.16	2.24	0	13	9	4	17	sw.	Dr. Jas. T. Anderson.
Benton	Lowndes	149	11								10.71	+ 7.05	3.40	0	12				se.	S. T. Pruitt.
Bermuda	Conecuh		25	66.4	+ 1.5	84	1†	42	4†	34	9.04	+ 5.85	2.68	0	13	12	9	9	se.	M. J. Morris.
Birmingham	Jefferson	701	24	63.3	− 0.2	81	28	39	3	30	8.92	+ 5.25	2.07	0	12	10	9	11	s.	U. S. Weather Bureau.
Calera	Shelby	500	11								7.82	+ 4.16	2.00	0	12				e.	L. G. Privett.
Camp Hill	Tallapoosa	738	11	64.5	+ 2.1	85	29†	37	3	38	8.47	+ 4.41	2.00	0	11	13	8	9	s.	Dr. Lyman Ward.
Cedar Bluff	Cherokee	594	8								7.57		2.00	0	7	12	12	6		Joseph L. Daniel.
Citronelle	Mobile	331	24	67.6	+ 0.6	87	14	44	3	28	14.38	+10.25	3.44	0	14	9	13	8	s.	Rev. W. H. Rowe.
Clanton	Chilton	590	19	63.9	+ 1.0	85	28	38	9	38	9.90	+ 6.16	3.10	0	16	10	5	15	se.	Joseph B. Downs.
Cochrane	Pickens	100	2								9.37		3.00	0	14				ne.	T. H. G. Cook.
Cordova	Walker	334	21	63.5	+ 2.2	89	12	35	9	42	9.21	+ 4.35	2.03	0	10	16	0	14	ne.	Scott Maxwell.
Cullman	Cullman	802	4	61.7		82	1	34	2	40	7.80		2.00	0	13	9	11	10	se.	Eugene A. Grayot.
Dadeville	Tallapoosa	700	7								9.81		2.38	0	13				sw.	Dr. W. B. Fulton.
Daphne	Baldwin		21	68.4[a]	+ 2.0	83	27	45	3	33	15.21	+12.30	5.10	0	10	11	7	12	se.	John H. Young.
Demopolis	Marengo		20								8.71	+ 4.35	2.20	0	17	15	3	12	se.	George E. Pegram.
Eufaula	Barbour	200	28	63.4	− 0.9	83	1	38	4	33	11.25	+ 8.01	4.08	0	15	13	7	10	nw.	Dr. J. B. Whitlock.
Evergreen	Conecuh	285	28	65.9	+ 0.6	88	22	35	9	43	9.52	+ 6.19	4.08	0	5	14	1	15	e.	Robert L. Whitcomb.
Flomaton	Escambia	91	20	67.7	+ 1.7	85	28†	40	4	34				0		21	2	7	s.	T. J. Farris.
Fort Deposit	Lowndes	520	28	65.4	+ 0.3	86	28	43	3	30	10.81	+ 6.58	3.45	0	11	14	3	13	ne.	J. F. Hattemer.
Gadsden	Etowah	621	28	63.6	+ 3.5	84	1	38	3†	38	9.10	+ 4.83	1.88	0	17	10	2	18	e.	D. P. Goodhue.
Goodwater	Coosa	826	17	63.0	+ 1.1	82	1†	37	3	40	8.69	+ 4.73	2.70	0	16	8	4	18	e.	Miss Daisy Buice.
Greensboro	Hale	220	33	65.2	+ 1.5	82	14†	44	3†	30	8.43	+ 4.26	2.80	0	12	12	2	16	s.	W. E. W. Yerby.
Greenville	Butler	444	11								10.65	+ 6.09	3.99	0	8					E. M. Lewis.
Hamilton	Marion		16	63.2	+ 3.2	81	28	37	9†	37	9.91	+ 5.65	2.26	0	15	10	12	8	se.	Prof. H. O. Sargent.
Highland Home	Crenshaw		20	67.3	+ 2.7	85	28	43	3	27	10.38	+ 6.64	4.30	0	12	9	9	12	s.	Prof. Samuel Jordan.
Livingston	Sumter	160	28	64.4	+ 0.6	90	22	41	9	42	10.92	+ 7.05	1.75	0	12	14	0	16	e.	Robert L. King.
Lock No. 4	Talladega	510	15	63.6[b]	+ 3.5	87	28	38	9	36	8.48	+ 4.03	1.32	0	12	18	2	10	w.	U. S. Engineers.
Maple Grove	Cherokee		19	62.2	+ 3.0	83	1	37	8	37	7.48	+ 2.80	2.00	0	15	8	17	5	nw.	Mrs. A. L. Awbrey.
Mentone	De Kalb	1,595	5																	E. Mason.
Milstead	Macon		9								11.80		3.90	0	12				e.	W. U. Wall.
Mobile	Mobile	84	40	67.9	+ 1.9	87	22	49	3	24	17.32	+12.97	5.01	0	11	6	11	13	se.	U. S. Weather Bureau.
Montgomery	Montgomery	240	40	66.0	+ 0.8	85	28	44	3	27	15.94	+11.69	4.23	0	12	6	9	15	se.	Do.
Newbern	Hale		20	65.4	+ 1.4	85	29	41	3	34	7.41	+ 3.26	1.80	0	13	10	11	9	s.	Dr. J. Huggins.
Oneonta	Blount	857	18	62.6	+ 2.9	81	28†	37	3	37	11.06	+ 6.68	2.73	0	16	10	2	18	n.	Aquilla J. Ketchum.
Opelika	Lee	817	33	62.6	− 1.0	79	28	41	3	25	9.21	+ 5.37	2.42	0	11	14	3	13	s.	A. H. Read, jr.
Ozark	Dale	400	10	65.9		86	28	42	8†	33	8.20		2.50	0	8	15	6	9	s.	Miss Lucy Sellers.
Prattville	Autauga	281	12	65.3	+ 2.5	84	14†	39	3†	34	13.50		3.09	0	13	11	10	9	se.	Joseph B. Bell.
Pushmataha	Choctaw		21	66.0	+ 1.8	87	27	39	9	35	9.72	+ 5.25	2.00	0	13	5	5	20	sw.	W. N. Horn.
Selma	Dallas	147	32	66.0	+ 2.3	87	14†	41	3	33	12.00	+ 7.73	3.82	0	17	15	5	10	e.	Charles F. Brislin.
Spring Hill	Mobile	312	8	68.4		88	22	40	3	32	14.84		4.90	0	9	11	4	15	s.	Spring Hill College.
Talladega	Talladega	554	22	65.2	+ 2.8	86	17	40	3†	33	8.27	+ 4.68	1.66	0	11	13	11	6	n.	W. E. Henkel.
Tallassee	Elmore		21								10.49	+ 6.66	2.60	0	16				se.	P. A. Noble.
Thomasville	Clarke	385	21	64.2	− 0.5	85	14†	39	3	38	12.53	+ 9.27	3.71	0	12	19	1	10	s.	Miss H. T. Forster.
Troy	Pike	581	4	67.6		86	28	44	3†	32	8.84		2.85	0	11	5	21	4	s.	Frank L. Zimmermann.
Tuscaloosa	Tuscaloosa	230	31	63.6	+ 1.6	84	28†	40	3†	36	10.41	+ 5.67	2.09	0	18	11	1	18	se.	W. S. Wyman, jr.
Tuskegee	Macon		12	66.2	+ 1.8	85	28	42	2†	36	12.42	+ 8.74	4.52	0	9	7	14	9	s.	Prof. Geo. W. Carver.
Union Springs	Bullock	216	25	66.4	+ 1.7	86	1	43	3†	32	13.02	+ 9.01	4.16	0	12	8	19	3	se.	P. L. Cowan.
Uniontown	Perry	273	26	66.8	+ 1.8	87	13	42	9	36	9.41	+ 5.49	2.67	0	12	8	6	16	e.	L. H. Moore.
Valley Head	De Kalb	1,031	27	61.9	+ 3.1	81	11	33	3	40	5.94	+ 1.32	1.66	0	8	13	13	4	s.	M. T. Floyd, M. D.
Wetumpka	Elmore	205	20	66.8	+ 3.3	86	28	41	3†	36	10.89	+ 6.76	2.60	0	9	15	0	15	n.	U. S. Engineers.
Mississippi.																				
Aberdeen	Monroe	210	24	63.6	+ 1.0	83	11	38	3	35	12.57	+ 8.51	2.34	0	14	10	4	16	s.	L. D. Godfrey, jr.
Agricultural College	Oktibbeha	424	22	64.4	+ 0.7	85	28	37	3	43	12.90	+ 8.77	4.40	0	18	4	18	8	se.	J. R. Ricks.
Bay St. Louis	Hancock	28	19	69.2	+ 1.5	87	22	48	3†	27	16.18	+10.86	4.02	0	12	9	10	11	se.	Brother Stanislaus.
Bay Springs	Jasper			66.4		86	27	40	3	39	5.47		1.05	0	11					J. J. Johnston.
Biloxi	Harrison	24	21	69.0	+ 1.2	84	22	48	3	26	18.29	+14.18	4.22	0	11	6	7	17	se.	Miss M. Josie Pope.
Booneville	Prentiss	504	18	62.6	+ 2.6	79	28	38	3†	27	5.58	+ 1.27	1.70	0	14	8	19	3	s.	Dr. D. T. Price.
Brookhaven	Lincoln	500	24	66.5	+ 0.4	88	27	40	3†	39	7.87	+ 1.83	2.44	0	12	9	3	18	se.	W. J. Bee.
Columbia	Marion	110	8								15.24		4.14	0	16	11	5	14	se.	N. R. Drummond.
Columbus	Lowndes	191	24	63.6	+ 1.5	83	14	39	3	32	11.36	+ 6.06	2.10	0	15	12	2	16	ne.	J. B. Love
Crystal Springs	Copiah	468	20	66.7	+ 1.4	90	27	39	3	35	11.13	+ 6.87	3.90	0	13	14	12	4		D. H. Miller.
Edinburg	Leake		4	65.0		87	28	37	3	36	9.19		2.62	0	16	11	3	16	s.	J. Y. Blocker.
Enterprise	Clarke	248	7								10.93		1.84	0	14	8	1	21	se.	J. B. Thompson.
Fulton	Itawamba		3								11.89		2.00	0	14	12	4	14	n.	A. L. Summers.
Hattiesburg	Forest	189	19	68.0	+ 1.8	90	28	41	4	36	9.02	+ 4.58	4.22	0	9	9	0	21	s.	T. C. Spence.
Hazlehurst	Copiah	460	22	65.4	− 0.7	88	13	40	3	40	13.10	+ 8.24	3.20	0	15	7	6	17	ne.	J. D. Granberry.
Hickory	Newton	326	2								9.91		1.88	0	13	12	5	13	s.	T. N. McMullen.
Jackson	Hinds	280	25	67.8	+ 2.4	89	14	40	3	36	7.78	+ 3.28	2.70	0	14	7	10	13	se.	A. S. Nall.
Lake	Scott	446	24	64.4	+ 0.4	86	28	40	3	37	9.51	+ 5.40	2.95	0	14	9	3	18	se.	Mrs. Eddie McNeel.
Laurel	Jones	241	8	66.4		88	27	41	3†	34	10.75		1.53	0	15				sw.	Thomas W. Flynt.
Leakesville	Green		18	68.2	+ 2.2	87	21†	42	4	36	15.50	+11.23	5.60	0	9					Dr. Sam Pool.
Louisville	Winston	561	23	63.8	+ 1.0	84	28	39	3	35	10.66	+ 6.42	3.31	0	15					B. T. Webster.
McNeill	Pearl River	230	9	68.4		85	22	45	3	27	11.39		2.79	0	13	7	14	9	se.	Prof. E. B. Ferris.
Macon	Noxubee	185	24	64.0	+ 0.4	84	14†	39	9	36	11.88	+ 6.78	5.25	0	16	11	2	17	e.	Finis E. Carleton.
Magnolia	Pike	415	16	67.8	+ 1.9	85	20†	42	3	31	9.27	+ 3.57	2.50	0	12	8	8	14	se.	Miss Ruby V. Roberts.
Meridian	Lauderdale	375	22	64.8	+ 0.7	85	28	41	9	31	9.44	+ 4.40	1.76	0	13	7	9	14	s.	U. S. Weather Bureau.
Merrill	George	76	7								20.16		4.64	0	16	10	2	18	s.	L. C. Helms.
Monticello	Lawrence	209	5	68.2		87	20†	41	3†	36	8.34		2.34	0	16	8	14	8	e.	Dr. G. A. Teunisson.
Okolona	Chickasaw	311	24	64.2	+ 2.9	85	14	38	3	39	12.50	+ 9.28	2.55	0	14	11	7	12	se.	E. J. Henson.
Pascagoula	Jackson	15	3	68.6		81	27	50	3†	26	8.19		3.20	0	11					McVey Young.
Pearlington	Hancock	10	24	69.0	+ 1.4	84	27†	45	4	29	13.14	+ 8.49	2.30	0	12	6	11	13	se.	Miss Annette Koch.
Porterville	Kemper		7	64.6		86	28	38	3†	38	10.02		2.54	0	13	10	9	11	sw.	I. S. Rea.
Shubuta	Clarke	197	7								12.44		3.06	0	16	10	4	16	s.	George A. Floyd.
Tupelo	Lee	278	13								12.26	+ 8.40	3.14	0	14	15	9	6	s.	W. S. Vincent.
Waynesboro	Wayne	191	25	65.3	+ 0.6	85	11†	40	3†	35	11.90	+ 7.35	2.73	0	12	10	3	17	s.	R. S. Burke.

[a], [b], *, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 2, South Atlantic and east Gulf States.*

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Virginia.																																
Arvonia	James	T.	.10	.07				.09			T.			T.	T.		.22	.41	.10			T.	.25	.11			.01	.28		.10	.22	1.96
Ashland	do			.15				.23			T.							T.	.39			T.	.31	.09			.08	.30		.24	.30	2.09
Bedford City	Roanoke		.30					.28							T.		T.	.45					.35							.83		.22	.10	2.53
Buchanan ‖	James		.72					.12	.21						T.			.11						.23						.65	.22		.16	2.42
Callavaille	Chowan	.03	.02					.21	.03					T.	T.				T.		.09	.31	1.03							.20		.30	T.	2.22
Cape Henry	Coast		.01					.26							.14		.01	.01	.16		.01		.89	.02								.61	.01	2.13
Charlottesville	James		.46					.15							.06	.04		.56	.09	.05			.16	.24				.23				.03	.08	2.12
Clarksville ‖	Roanoke		.35						.20						.15			.28	.10	.05		1.00							.08			.80	3.01
Columbia	James		.25					.19							T.		.10	.45	.55				.33								.75			2.62
Danville ‖	Roanoke		.39	.03				T.	0.44						.14		.08	.54	T.			.02	.04	.82				T.	.23	.70	.35	3.78
Diamond Springs	Coast								.46								.10	T.	.23	T.			1.36	.05							.46	.37	3.03
Hampton	do		.09					T.	.35		T.				.14	T.	.51	T.	.08		T.	.05	1.54							T.	.19	2.95
Hot Springs	James		.72					.40								.05	.01	.17	.08				.37	.05			.01	.47		.22	.35	2.90
Lassiter	do		.32					.27						.20				.25	.45									.33		.47			2.34
Lexington	do	.34	.70					.10						.05			.15	.23					.26				.02	.41	.09	.11			2.46
Lynchburg	do	.08	.14					.23						.08				.23	.01				.25				.06	.58		.23			1.89
Newport News	Coast		.08	T.				.38	.05		T.				.08		.42	.02	.10		.01	.11	1.53					.02		.15	.02	2.97
Norfolk	do		.01					.27							.12		.04	.01	.15		T.	.02	1.18	.02				T.		.96	T.	2.78
Randolph ‖	Roanoke		.35					.08	.55						.16	.10		.34		.13		.03	T.	1.10						T.	1.03	3.87
Richmond	James	.01	.06					.23			.01				T.	T.	T.	.01	.67			T.	.34				T.	.28		.51	.05	2.17
Roanoke	Roanoke	T.	.24					.30							T.		.03	.20			T.	T.	.10	.03	.08		.05	.68		.22	.10	2.03
Rocky Mount	do	.07	.20					.18									.14	.40					.24					.48		.34		2.05
Spottsville (near)	Chowan	.20			T.			.48	.50						T.				T.		.28	.62	.58								.35	3.01
Williamsburg	James		.10	.75					.20								T.	T.		.20		.25	.25					.10		.35		2.20
North Carolina.																																
Albemarle	Pedee	.34						.25									.04	.05			.34	.12	2.55				.07		.55	.02	4.33
Beaufort	Bogue Sound			.06					.24						.12			.74	.37		.09	.56	.47								.49	3.14
Belhaven	Pungo							.30							.10						.10									.10	.70	1.30
Brewers	Pedee	.62	.13					.30	.02				T.	.14	.01		.07	.39	.14			.06	.93				.05	.39		.89		4.14
Caroleen	Santee	.33	.02					.12									.90	.32			.22	.08	2.00				.60		.49		5.08
Chalybeate Springs	Cape Fear	.15	.01					.35						.02			.10	.21	.14		.20	.10	1.07			T.	.03		.51	.81	3.70
Chapel Hill	do	.30	.02					.46						.56			T.	.11			.10	.13	1.53	.08			.16		.19	.24	3.88
Charlotte	Santee	.15	T.					.05			T.			T.	.01		.31	.19	.30		.38	.10	1.96			T.	.10		.37		3.92
Chimney Rock	do	.60						.08							.10		.41	.70			.10	.08	1.50				.76		.26		4.59
Durham (near)	Neuse	.29	.11					.56						.08				.11			.38	.05	1.58	.42			.09		.24		3.91
Eagletown	Chowan	T.	T.					.14	.17						.10		.20	.16	.35		.08	.20	1.28	.16		T.	.06		.62	.68	4.20
Edenton	Albemarle Sound.																		.20		.05	.15	.25							1.75	2.40
Elizabeth City	Pasquotank			.15					.30										.35			.40	.20							1.40	2.80
Elizabethtown ‖	Cape Fear						.40						.83						.96			.54		.33	.10	.19					3.35
Enfield (near) ‖	Tar								.30									1.45	.04			.20	.05	1.90						1.00	4.94
Fayetteville ‖	Cape Fear		.10	.92					.15							.06		.40	.10	.20		.35	.09	.23						1.65	4.25
Globe (near)	Santee	.70	.60					.16					.22					.76	.26		.12		1.04				.53		.60		4.99
Goldsboro ‖	Neuse			1.15					.35					T.	T.			.02	.16	.38		.33	.06	.27				T.			1.40	4.12
Gorge (near)	Santee	.56	.26						.16						T.		.06	.60	.04		.12	.03	1.05				.36		.49		3.73
Graham ‖	Cape Fear		.46						.28						T.	.02		.82	.07			.08	.06	1.73				T.	.22		.54	4.28
Greensboro ‖	do		.62					.04	.33								T.	.15	.10				.19	1.72					.22		.15	3.52
Greenville ‖	Tar		.01	.12					.30							.01		T.	.21	.28		.15	.06	.18				.03			1.12	2.47
Hatteras	Pamlico Sound.	T.		.01				.16	.03					T.	.07				.20	.57		.35	.11	.04				T.			1.01	2.55
Henderson	Tar and Roanoke.	.66	.16					.41						.28	T.			.14			.22	.23	1.15				.08	.07		.44		3.84
Kings Mountain (near).	Santee	.30						.18						.01			1.18	.29	.01		.15	.12	2.76						.32	.59		5.91
Kinston	Neuse	.02		.22					.58						.02			.20	.42		.20	.13	.02							.27	1.77	3.85
Lenoir	Santee	.45	.52					.16										.90	.15		.10	.04	.92					1.35	2.00			6.59
Louisburg ‖	Tar		.22						.28						.15			.48				.10	.17	2.20			T.		.10		.60	4.30
Lumberton ‖	Lumber		T.						.17						T.	T.		.38	.16	.11		.55	.07	.09					T.		.60	2.13
Manteo	Roanoke Sound								.10						.06			.04	.07		.04	.14									.04	1.34	1.83
Marion	Santee	.83	.18					.19			T.		.10	.01			.06	.52	.13		.14	.04	1.07				T.	.60		.12		3.99
Middletown	Pamlico Sound.								.25					.97			.08	.85		.07	.40	.02									1.40	4.04
Moncure ‖	Cape Fear		.18	.01				T.	.33						.05			.08	.06			.22	.15	1.39							.72	3.19
Monroe	Pedee	.06						.17									.46	.21	.08		.43	.14	.24				T.		.10			1.89
Morganton	Santee	.67	.02	.03				.02					T.				.04	.86	.03		.15	.03	1.35					.56		.58		4.34
Mount Airy	Pedee	.64	.37					.34							T.		T.	.42			.12	.04	.48			T.	.45		.70			3.56
Mount Holly ‖	Santee		.42					T.	.18								.50	.42	T.			.16	.88	1.78						.30	.15	4.79
Nashville ‖	Tar		.12	.17					.35						.10	.03		.40	.05	.09		1.18	.06	1.58			T.				1.00	5.13
Neuse ‖	Neuse		.19	.05					.22							.05		.06	.12			.16	.10	2.12							.94	4.01
Newbern ‖	do		T.	.08					.28						T.	T.		.03	.25	.27		.38	.07	.14					T.		.48	1.98
North Wilkesboro	Pedee	.94														*	*	1.40			.20	.20		.80				.45		.77			4.76
Parkersburg	Cape Fear	T.						T.							T.		T.	.30	.45		.35	.25	.20							.25	.60	2.40
Pinehurst	Lumber	.12	T.					.09						.02			.28	.09	.42		.76	.30	.50							.61		3.19
Raleigh	Neuse	.16	T.					.29			T.			.02			.06	.23	T.		.17	.09	1.93	.01		T.	.02			.75	.01	3.74
Ramseur	Cape Fear	.30	.12					.39									.15				.20	.16	2.00				.27		.11	.19	3.89
Randleman ‖	do		.46						.35									.15	.04				.46	1.73								3.19
Reidsville ‖	do		.60						.35								.61	.31	.05			.19	.12	1.12					.25	.12	.13	3.85
Rockingham	Pedee		.45					.10								.10	.70			.30		.25								.75		2.65
Rocky Mount ‖	Tar			.10					.30							.13		.10					.24	1.46							.71	3.04
Salem	Pedee	.51	.37					.41									.34				.95	.05	1.30				.36		.54		4.83
Salisbury ‖	do		.62														.87	.40				.15	.85	1.42					.30			4.61
Saxon ‖	Roanoke	.67	.16					.34										.93	.09			.10	.74					.24		.86		4.15
Scotland Neck	Tar		.05						.22						.05			.51	.17		.10	.13	.95							.51	.75	3.44
Settle	Pedee	.35	.20					.16						T.	T.		.30	.33			.15	T.	1.38				.40		.28		3.55
Sloan	Cape Fear	T.						.21										.40	.37		.19	.15								.25		1.57
Smithfield ‖	Neuse		.10	.05					.30						.01			.13	.13	.10		.25	.15	.45				.01			1.01	2.09
Snow Hill	do			.20					.41						T.	.03		.11	.23		.30	.10	.22							.46	1.03	3.15
Southern Pines	Cape Fear	.05	.25					.35							.10		.60	T.	.45		.30	.10	.40				T.	.10	.25			2.95
Southport	do			.08					.23		T.			.10				.38	.65		.40	.21	.19							.04		2.28
Statesville	Pedee	.58	.13					.26									.62	.49			.18	.05	1.30				.33		.22			4.16
Tarboro ‖	Tar		.02	.02					.30						.01	.13			.40			.18	.08	.30				T.			1.75	3.19
Tryon (near)	Santee	.32	.30												.07	.93		.85			.21	.07	1.58	.66	.93							5.92
Weldon ‖	Roanoke		.11	T.					.18			T.				.03	T.	.14	.06	.09		.03	.21	1.79				T.	.07		1.00	3.71
Willard	Cape Fear								.19									.52	.43	.22	.22	.05									.70	2.33
Wilmington	do		.05					.14						.03	T.	.40		.71	.25		.32	.16	.25				T.	T.			.42	2.73
South Carolina.																																
Aiken	Edisto													.75							1.00	.29	.73									2.77
Allendale ‖	Savannah													.30					1.10				.10	1.00								2.50
Anderson	do	.03												.09			1.07	.38	.06		.61	.03	1.22				.22		.03		3.74

TABLE 2.—*Daily precipitation for April, 1912. District No. 2*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
South Carolina—Con.																																
Batesburg ‖	Edisto		T.	T.					T.			T.			.18		.97	1.26	1.68			.43	.08	.97					T.		T.	5.57
Beaufort	Coast		.15					T.			1.70			2.41				1.00			1.81	.35	.81								8.23
Blackville ‖	Edisto								.02			.03			.10	.70	.03	.89	.34			1.25	.68	.53							.12	4.60
Blairs ‖	Broad			.27				.02						.15			.82	.79	.08			.42	.15	.45					.06		.20	3.41
Bowman	Edisto		.03								.08			.27		.05		.30			1.70	.06	.64					T.		T.	3.13
Broxton ‖	Satchatchie													.60			.54	.40	1.96			2.10		1.05							7.25
Calhoun Falls ‖	Savannah											.23	.02				1.26	.74	.68		.20	.72	.32	.43			.27				.26	5.13
Camden ‖	Wateree														.24		.10	.24	1.96			.30		.36						.54		3.74
Catawba ‖	Catawba			.08				.04	.12								.85	.23	.16			.66	.27	.20					.12		.14	2.87
Chappells ‖	Saluda																.10	1.18				.58	.62	.24								2.72
Charleston	Coast		.30					T.			.54			1.71			T.	.20	.05		1.32	.35	.45								4.92
Cheraw ‖	Pedee		.07	.13				.02	.08						.14		.04	.12	.28	.05		.50	.05	.49					.02		.65	2.64
Clemson College	Savannah	.10						.12						.15	.05		1.30	.30			.60	.30	2.00					.56	.30			5.78
Columbia	Congaree	T.	T.					.01			.01			.51	T.	.03	.13	.38	.61		.39	.06	.44					.05		.15		2.77
Conway ‖	Waccamaw			T.			T.	T.				T.			.25			.55	.07	T.		.20	.72	.25								2.04
Darlington ‖	Pedee		.03	.04				T.	.02			.01			.15		.20	.53	.25			.33	.05	.40		.01			.01		.36	2.39
Dillon	Little Pedee	.02	T.	.03			.15				T.			.01			.05	.64	.24		.48	.06	.45		T.			T.		.10	.10	2.33
Edisto ‖	Edisto											.09		.20	.40			.49	.25			1.66	.29	.33							.09	3.80
Effingham ‖	Lynches							T.	.10						T.		T.	.90	.30	.10	T.	.10	.05	.50							T.	2.05
Ferguson ‖	Santee			T.					.02					.05	.40		.04		.52	T.		.95	.60	.65								3.23
Florence ‖	Pedee			.24						.10							.12	.54	.40	.09		.36	.12	.50							.16	2.63
Georgetown	Coast										.21			.31			.08	.25	.65	1.90	1.06	.45	1.35			.65						6.91
Greenville ‖	Saluda		.18						.10					.06			1.90	.57	.02			.57	2.86						.86	.09	.96	8.17
Greenwood ‖	do																1.50	.66	.49			.56	.10	.44						.16		.39	4.30
Heath Springs	Wateree	.10	.50					.06						.04			.34	.63	.23			.43	.39					.08		.15	.15	3.10
Kingstree ‖	Black								.07			T.			.45			.32		.05		.84	.20	.22							.07	2.22
Liberty	Savannah	.10	.15				.20				T.			.15		T.	.90	.52			.40	.05	2.40				T.	1.20		.78	1.05	7.90
Little Mountain	Saluda	.03	.01											.10		.94		.75	.50		.35	.63						.10		.17		3.58
Meriwether	Savannah	T.	.13	.27				.03			T.			.47			1.77	1.07	.34		.77	.25	1.01					.04		T.		6.15
Newberry	Saluda	.01	.40					.05			T.			.10			1.17	1.42	.15		.41	.06	.55					.14		.03		4.49
Pelzer ‖	do	.04	.02														1.40	.52	.04			.70	.96	.66							.52	5.26
Pinopolis	Cooper		.10								.26			.95	.03			.36	.29		1.00	.55	.55									4.00
St. George ‖	Edisto																	.33	.29			1.70		1.00								3.32
St. Matthews ‖	Santee								.05					.09	.45			.52				1.10	.20								.12	2.53
Saluda	Saluda																1.20	1.19	1.29		.45	.05	.83					.10		.55		5.66
Santuck	Broad	.06	T.					.05			T.		1.18	.05			.78	.43	.18		.66	.09	.69					.29		.01	T.	4.47
Smith Mills ‖	Pedee								.07			.08			.22			.55	.33	.21		.66	.20	.39								2.71
Society Hill	do													.08		.34	.39	.96			.42	.21								1.01		3.41
Spartanburg ‖	Broad	.07	.18					T.	T.								.42	.22				.51	1.32	1.18					.45		.68	5.03
Summerville	Ashley		.16	.25				T.			.39	.02		.77	.66	T.		.34	.18		1.28	.38	.51									4.94
Trenton	Edisto	T.	.22					.08			.04			.32			.40	1.51	.55		.33	.40	1.14					.10		T.		5.09
Walterboro	Ashepoo		.16					T.			.15			1.32				.38	.30		1.49	.44	.93									5.17
Winnsboro	Broad		.50								T.					.75	.90	.23			.53	.20	.60					T.	.10	.20		4.01
Winthrop College	Catawba	.07	.03					.10			T.		T.	T.	T.		1.19	.32	.10		.51	.13	1.38					.15		.08	.05	4.11
Yemassee ‖	Combahee	.03		.25					.05			.64		.52	1.42			.18	.48			1.78	.22	.65								6.22
Georgia.																																
Abbeville ‖	Ocmulgee			.08								.71		.08				.32	1.52		.18	3.67	.21	.73							T.	7.50
Adairsville	Coosa	.20	.10					.15			T.			T.	T.	.30	.10	.55				.36		1.65					1.50		.40		5.31
Albany ‖	Flint			.26							.52	.15		.15				.14	1.18			.67	3.43	.75	2.27							.24	9.76
Allapaha ‖	Allapaha			.94								.40		.03	.22				2.37			.60	2.23	1.37	1.43						2.10		11.69
Americus ‖	Flint			T.							T.	.23		.33			.08	1.10	.56			.60	3.42	.18	.86								7.36
Athens ‖	Oconee			.11					.02					.06			1.72	.85	.15			.66	.20	.57					.41		.09	4.84
Atlanta	Chattahoochee	.03	T.				T.	.08			.01		.06		.03	1.57	1.28	.55				.89	.05	1.51				T.	.40	T.	.19		6.65
Augusta	Savannah		.01					.01			.04			1.31	.01		1.19	.70	.01			1.38	.25	.58					.01	T.	T.	.10	5.60
Bainbridge ‖	Flint			.73								.58		1.10	.33			T.	1.96			.55	5.30	.46	.08					T.		.14	11.23
Barnesville	do		.05					.14			.30						2.40	1.27				1.50	.45	1.39					.13				7.63
Butler ‖	do			.17								.47		.25			.50	2.10			.40	2.75	.60	.90						.20		.23	8.57
Camak ‖	Savannah	T.		T.					T.		T.			.75			.63	.73	.89		T.	1.66	T.	.61					.05		T.	5.32
Canton ‖	Coosa		T.	.21				T.	.14		T.						1.06	.77			T.	.82	1.59	.10				.65	.46	.14	.61	6.55
Carlton ‖	Savannah													.14			1.40	.44	.05			.60	.10	.54					.15		.17	3.59
Clayton	do	.38	.20					.22						.40		.50	.15	.42	.12	.40	.40		1.45						.81	.90		6.35
Columbus ‖	Chattahoochee	T.							.15			.33		.31		.10	.24	3.09	.02		1.02	2.02	.22	1.36					.14		.14	9.14
Covington	Ocmulgee	.10															1.10	1.20	.30			1.00	.10	1.20					.25	.10	.50	5.85
Cuthbert ‖	Chattahoochee										.33		.73	.10			2.32	.49		1.00	3.58	1.30	2.23								.35	12.43
Dahlonega	do	.23	.17					.18			T.	T.		.08	T.	.89	.18	.50	.08		.47	.04	1.62					1.00		.24		5.68
Diamond	Tennessee	.46	.71				T.	.87			T.			T.	.12	.80	1.30	.30			.70		2.80					1.38		1.28		10.72
Dublin ‖	Oconee			.10							.05	.35	T.	.68	.08		.08	.55	1.45		.23	2.89	.31	.68							.05	7.50
Eastman ‖	Dodge			T.							.02	.78		.23	.08	T.	.01	.22	1.46		.18	2.56	.55	1.61							.05	7.75
Eatonton	Oconee		.08					.08			.17			.12			1.92	1.54	*		2.50	.44	.62					.20				7.67
Elberton	Savannah	T.						T.						.22			1.36	.73	.16	.68		.05	.80					.20		.20		4.40
Experiment	Ocmulgee	.22	.04					.14			.06			.06		.08	1.50	1.40	.14		1.37	.22	1.08					.20		.63		7.14
Fort Gaines ‖	Chattahoochee			.40							T.	.55		.50	.12			1.60	.35		.80	3.90	.75	.80							.10	9.87
Gainesville ‖	do	.04							.10			.06		.07			1.54	.58				.65	.62	.84					.72	.10	.50	5.81
Glennville ‖	Altamaha			.33								.32		.03	.53			.02	1.00			1.70	.53	.95							.15	5.56
Gore	Coosa	.24	.06				T.	.22						.01	.02	.21	.44	.42	.04		.19	T.	.87				T.	1.55		.68		5.02
Granite Hill	Ogeechee		.01					.01				.12		.54		T.	1.69	1.71	.36		1.60	.47	.53					.05		T.	T.	7.09
Greensboro ‖	Oconee											.24		T.			1.42	.78	.32			1.32	.08	1.05						.18		.04	5.43
Griffin ‖	Ocmulgee	.24							.15								1.62	1.61	.73		T.	.96	1.48	1.27						.30		.71	9.07
Harrison	Ogeechee											.65		.48			.90	1.20	1.00		2.90	.65	1.70								.08	.05	9.61
Hartwell	Savannah																1.02	.35	.09			.04	.88					.32		.06		2.76
Hawkinsville ‖	Ocmulgee										.06	.04					*	*	2.40		.59	3.32	.07	.40								6.88
Lisbon	Savannah		.25					.04						.27			1.20	.80	.04		.15	.06	.85					.06		.02		3.74
Lost Mountain	Chattahoochee							.20						.13			.46	.30	.30			.80	2.00					.86		.63		5.68
Louisville	Ogeechee										.39			.82		.28	1.12	.57			1.75	.81	1.05							.43		7.22
Lumber City ‖	Ocmulgee			.48								.42		.10	.10			.05	.85		.18	2.30	1.03	1.13							.25		6.89
Macon	do		.09								.47		.07	.05	.03	1.23	1.07	.93			2.17	.58	1.27					.17		.01		8.14
Marshallville ‖	Flint		.18					T.			.36	.17		.24			.76	2.92	.24		3.35	1.06	.76	T.				.10			.12	10.26
Milledgeville ‖	Oconee	.19							T.		.08			.38			1.50	2.10	.46		.06	2.03	.25	1.15						.10			8.30
Millen ‖	Ogeechee										.20	.55		.75	.12			1.10	1.20			2.20	T.	.70								.10	6.92
Mineral Bluff	Tennessee	.48	.19				T.	.29			T.		.11		T.	.15	.25	.30	.12	T.	.26		1.25				T.	1.60		.51	.03	5.54
Montezuma ‖	Flint			.05					.08			.35		.40			.28	1.65	.48		.68	2.65	.34	.81							.14	7.91
Monticello ‖	Ocmulgee	.17		.11							.20						1.59	1.67	.23		.20	1.60	.03	.64					.10	.01	.47	7.02
Newman ‖	Chattahoochee	.20							.40		.05		.41		.30		1.10	2.20	.20		.11	1.39	.06	.59					.63	.48	.15	8.27
Norcross ‖	do	.02							.04			.01					1.08	.72	.10		.04	.70	.24	.48					.56		.22	4.21
Point Peter	Savannah							T.						.20			.80	.40				.63	.75					.11		.10		2.99
Poulan	Suwanee		.48								.59	.07	.19					.87	.32		3.30	2.20	1.75					.03		.65		10.45
Putnam	Flint		.20								.30			.60			1.20	.25			2.80	2.00	1.35							.30	.35	9.35
Quitman ‖	Suwanee			.52								.76			.79				3.67			3.53	1.61	.54							.26	11.90
Ramhurst	Coosa	.48	.10				T.	.39			.05				.41	.32	.12	.41	.31		.26		1.36				T.	1.10		.47		5.78
Resaca ‖	do	.30	T.					.22						T.		.10	.47	.07			.22	1.20	T.					1.05	.42	.20	.10	4.35

TABLE 2.—*Daily precipitation for April, 1912. District No. 2*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Georgia—Continued.																																
Rome‖	Coosa	.25	.04	.13				.12	.05		T.	.08		.02	.30	.05	.12	.68	T.		.05	.40	2.60	T.				.75	.89	.03	.40	6.96
St. George‖	St. Marys			.42								.35		.20			.07	.52			1.68	.77	T.							1.02	5.03
St. Marys	do		.48								.07	.57		.18			.12	T.	.07		1.66	1.02	.22							T.	4.39
Savannah	Savannah		.71					T.			.57	.01		.62	T.	T.	.02	.49	T.		1.47	.51	1.38						T.	T.	5.78
Statesboro‖	Ogeechee		.20								.81	.02		.76		T.	T.	1.45	.43		1.85	.42	.71								6.65
Talbotton	Chattahoochee						.15				.33	.03					.52	1.15			2.14	.65									4.97
Tallapoosa‖	Tallapoosa	.35							.25		T.	T.		.17		T.	.42	.92			.14	.73	1.35	.27				1.38	.09	.60	6.67
Thomasville	Ocklochnee		.90								.63			.85			T.	1.58			3.27	2.16	.36				T.		.58		10.33
Tifton	Suwanee		.74								.50			.20			.11	1.20			3.40	2/25	1.74						.05		10.19
Toccoa‖	Savannah		.10	.02										.20	.05		1.07	.42				.70	1.90	.40			.50	.37	.09	.62	6.44
Valdosta‖	Suwanee			.20								.45			.70				2.45		T.	2.70	1.50	.35						T.	8.35
Washington‖	Savannah	T.		.21			.03		.08		.08	.03		.46	.05		1.36	1.42	.23		T.	2.84	.04	2.00				.10		.52	9.37
Waycross‖	Satilla			.35								.37			.17				2.07		.04	2.37	2.64	1.51						.17	9.69
Waynesboro‖	Savannah										.07	T.		.95			T.	1.35	.68			2.25	.55	.80						.12	6.77
West Point‖	Chattahoochee	T.							.15		.12	.10		.29		.01	.34	2.63	.50		.50	1.68	T.	1.77				.03	.10	.60	8.82
Woodbury‖	Flint								.12			.31		.07			.47	1.65			.48	1.81		1.02				.11		.32	6.36
Florida.																																
Apalachicola	Coast		T.											3.60				2.00	.18												5.78
Arcadia	Peace Creek			.03						.03		T.					.22		.10									.40	.06		0.84
Archer	Waccasassa																		1.35												1.35
Bartow‖	Peace Creek			.21							.01		.03		.02			.35		.48	.34		.01		.07						1.52
Blountstown‖	Apalachicola													2.50					3.00			9.50				2.50					17.50
Bradentown	Manatee								.04										.78	.24								.07			1.13
Brooksville	Withlacoochee			.22									.40		.37				.45					.20							1.64
Carabelle	Coast		.10											2.15				1.05	.30		.10										3.70
Cedar Keys	do													.98					.87												1.85
Clermont	Lake	.07	T.												.38	.75			.32	.05				.62							2.19
Crescent City	St. Johns			.49							.02			.67	.33		.13		1.10		1.38	.02									4.14
De Funiak Springs	Choctawhatchee						.45		.44				.38	1.62				2.80			2.60	.46					.46				9.21
De Land	St. Johns			.36		T.						.06		.90	.20				.42	.03	.26	.16		.42							2.81
Eustis‖	Lake			.47								.05	.50		.46			.02		.40				.08	.03				.05		2.06
Federal Point	St. Johns					.13			T.		.07	.02		.06	.01		.29	.04	2.09		.52	.42									3.65
Fenholloway	Fenholloway			.30										1.82	.10				.76			3.50									6.48
Fernandina‖	Coast			.36								.92	.03		.16	.03	T.	.01	.15	.02		.56	.68	.55							3.47
Fort Meade	Peace Creek								T.		T.	T.					.34		.20	.20									.33		1.07
Fort Myers	Caloosahatchee						T.					T.				T.			T.								T.	.20	T.		0.20
Fort Pierce	Indian			.20		.10				2.10	.40			.20	.20						.20										3.40
Gainesville‖	Lake			.10											.30				.95	.05		.02	T.								1.42
Grasmere	do			.28					T.			T.		.19	.18		.06		.39	T.	.01			.25						T.	1.36
Hilliard	Nassau		.30								T.	.30						.35			.88	1.23							.06		3.12
Homestead	Coast								.11	.05	.02	.04	.09	.17	.01	2.30		.01			.12				.13	1.55	.03	.40			5.03
Hypoluxo	Lake										.31			.06	.33	.13				.16					1.01	.22					2.22
Inverness‖	Withlacoochee		.56											.34					.54						.18						1.62
Jacksonville	St. Johns		.11								.33	.04	.01	.12			.12	.08	.58		.42	.76								2.39	4.96
Jasper	Suwanee											.20		.70				.37	.45		2.25	1.75								2.70	8.42
Johnstown	do		.35								.05			.19				3.00			.66	.94								.83	6.02
Key West	Coast			.17		.05	T.		.01	T.		T.							.45	.20	T.	T.		.43			.02				0.25
Kissimmee	Kissimmee			.23								T.		T.	T.																1.31
Lake City	Suwanee			.15							T.			1.05					.83			1.60	1.36							.74	5.73
Live Oak	do													1.21							.67	2.22						.11		.98	5.19
Macclenny	St. Marys										1.02			.21			.11	.15	.85		.50	3.00								4.57	10.41
Madison	Suwanee		.10									.23			2.20				1.03			4.37	1.70	T.						2.00	11.63
Malabar	Indian			.11					.02	.40		.62			.54				.11			.14									1.94
Marianna‖	Apalachicola											.45		1.14	.46			.07	2.00		1.01	6.90	.05	.25						.26	12.59
Merritts Island	Indian			.12				T.	T.	T.	T.	.79		.22					.08	.10	1.06	.02	T.	.08							2.47
Miama	Coast			.67			T.		.01			.71	1.54	T.	.43					.15					.15	1.92			.03		5.61
Middleburg	St. Johns			.10								.05					10		.22	2.00		.13		1.80						.76	5.16
Molino	Escambia		.25								1.14			3.95			1.55	1.65				.95	6.05						.38		15.92
Monticello	Aucilla		.30								.26			1.36				1.00	1.30			2.00	3.95						.63		10.80
Mount Pleasant	Apalachicola										.23	.80		1.85				1.25			3.50	2.10								.12	9.85
New Smyrna‖	Coast			.36	.05		.04			.05		T.				.33		.59		.25	T.	.48	.11		.11						2.37
Observation Island	Caloosahatchee													.32	.30	.45											T.				1.07
Ocala‖	St. Johns	.20										.10	.18	.62				2.15	T.				.37								3.62
Orange City	do											.42		.36					.37		.60			.18							1.93
Orlando	do			.23		T.				T.	.24		T.	T.	.20		.03		.32	.10	T.			1.80	.48		.90				4.30
Pensacola	Coast		.25					.07	T.		.70		1.43	1.66		.21	.03	.63		.76	3.72	1.21	.13						.22		11.02
Pinellas Park	do			.05															1.10	.12								.15			1.42
Plant City	Hillsboro			.71										.18					.70	.40											1.99
Rockledge	Indian											1.10			.21				.08	.19		.39		.09	.07						2.13
Rockwell	Withlacoochee													1.05					1.66												2.71
St. Andrew	Coast		.27				.01							2.94	.21		.04	.87	.02		2.49	2.42	.01							.05	9.33
St. Augustine	do			.20								.10		.15					2.87		.35	.89									4.56
St. Leo	Withlacoochee			.20						.04					.19				.36	.28							.03				1.10
Sand Key	Coast			T.	.01	.01	T.			.10									.29		.35	.21				.08	.15				0.35
Satsuma Heights	St. Johns			.15											.47		.57	.32	1.27	T.	.08										2.86
Switzerland	do		.29									.50		.10					2.02		.45	1.05								.21	4.62
Tallahassee‖	Ocklocknee			.21								.55		.05	1.65				3.40		.25	5.40	1.40							T.	12.91
Tampa	Coast			.23						T.	.03				.01				.88	.16				T.			T.				1.31
Tarpon Springs	do			.55						T.					.29				.35	.21											1.40
Titusville	Indian			.06					.06	.01	.20	.60	.04	.03	1.20				.14	.02	.26	1.02	.04	.65	.06						4.39
Alabama.																																
Alaga‖	Chattahoochee			.50					.06		T.	.32		.90	.10			.06	.03		.51	3.65	.50	1.46						.54	8.63
Anniston	Coosa	.38	.17				T.	.43			.23		.58	T.	.41	.65	1.29	.04			.77		1.26				T.	1.39		.75		8.35
Ashville	do	1.10	.13					.53			.29		.28	.26		1.62	1.75	.10			.96		2.05					1.85		.37		11.29
Auburn	Tallapoosa						T.	.20			.45		.02	.42	.01	.22	.64	2.04			2.22	.78	2.24					.01	.88			10.13
Benton‖	Alabama		.04						.24		.12	.09		.64		.75		3.40			1.84	1.42	.97	T.					.46	.74	T.	10.71
Bermuda	Escambia		.04					.65			.87		.05	.86		.15	.41	2.68			1.82	1.31	.05				T.	.13		.02		9.04
Birmingham	Black Warrior	.35	.18				.04	.53			1.05		.27		T.	.84	2.07			T.	.60	T.	.94				T.	1.72		.33		8.92
Calera‖	Coosa	.10							.35		.15	.30		.60				.42	2.00		1.22	.15	1.00						.78	.75		7.82
Camp Hill	Tallapoosa							.12		.28				.67		.25	.75	1.50			2.00	.77	1.23						.20	.70		8.47
Cedar Bluff	Coosa							.25					.90		2.00						.47		1.95				.90		1.10		7.37
Citronelle	Alabama							.12	.01		.55	.05	1.60	1.20		.10	.75	2.05			2.72	3.44	.04				1.62		.13		14.38
Clanton‖	Coosa		.04						.20	T.	.12	.22		.64		.70	.44	3.10	.03		.94	.99	1.16	.20					.16	.12	.84	9.90
Cochrane‖	Tombigbee	.47	.30					.21			.75	.10		.25	.15		1.55	3.00			1.10	.18	.41						.80	.10		9.37
Cordova	Black Warrior	.29						.50			.85		.40			1.09	2.03				.25	1.80					1.00	1.00				9.21
Cullman	do	.30				.50	.23				.33		.13	.10		1.40	2.00	.02				.10	1.90				.04			.75		7.80
Dadeville	Tallapoosa							T.	.18		T.	.05		.89		.05	.34	2.38	.10		.50	1.96	1.75	.24					.24	T.	1.13	9.81

TABLE 2.—*Daily precipitation for April, 1912. District No. 2*—Continued.

Stations.	Watershed.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Alabama—Contd.																															
Daphne	Gulf of Mexico		T.					.03			1.50		1.48	1.70	.03	.45	1.85	5.10			.32	2.75								T.		15.21
Demopolis ‖	Tombigbee	.22	.14						.12		.35	.75		.26	.22	.24	1.17	2.20			1.04	.47	.80	.02				.03	.03	.65		8.71
Eufaula ‖	Chattahoochee	T.		.23				T.	.01		.26	.06		.80	.08		.06	2.30	.16		.92	4.08	.32	1.58				T.	.01		.38	11.25
Evergreen ‖	Escambia													2.10				4.08			.56	2.30	.48								9.52
Fort Deposit ‖	do								.20		T.	.80		.15	T.		1.88	3.45	.35		.70	1.80		1.06				.20		.22	10.81
Gadsden ‖	Coosa	.85	.08					.18	.22		.04	.40		.18		.18	.94	1.25	.03		.12	.40	1.88					.40	1.25	.70		9.10
Goodwater ‖	do	.04							.12		.10	.19		.54		.35	.50	2.70	.08		.60	.87	.98	.10					.28	.60	.64	8.69
Greensboro ‖	Black Warrior		.19					.42			.65		.10	.16			.38	2.80			1.20	.30	.90					.03		1.30		8.43
Greenville ‖	Escambia								.12					1.42		.82	3.99				1.92		1.04		1.15					.19	10.65
Hamilton	Tombigbee	.55	.26				.16	.65			.55		.15	.35	.18	1.38	1.40	.03			.30		.48				2.26	1.21				9.91
Highland Home	Escambia		.07					.10			.69		.02	.12		1.21	.31	4.30			1.65	.83	.81				T.	T.		.27		10.38
Livingston ‖	Tombigbee	.46							.23			1.26		.49	.43	1.44	1.57				1.00	.50	1.75						1.19	.60		10.92
Lock No. 4	Coosa	.73	.06					.28			.30		.40			.90	1.03	.75			.74		1.27					1.32		.70		8.48
Maple Grove	do	.11					.10	.15		.12	.16		.10		.28	.68	1.50	T.		.08	.45	1.36					2.00	.34	.05			7.48
Milstead ‖	Tallapoosa		T.	.10					.10			.40	.20			1.10	.50	3.90			2.10	1.60	.10	1.00							.70	11.80
Mobile	Gulf of Mexico	T.	T.					.11			1.25		1.91	2.36		3.16	.92	2.12		.14	3.15	2.14	T.						T.	.06		17.32
Montgomery	Alabama		.03					.17			.43		.73	T.	3.86	.37	2.96	1.27			3.25	1.04	1.01					T.	*	.82		15.94
Newbern	Black Warrior		.27				T.	.17			.78		.21	.03	.01	.36	1.80				1.44	.33	1.40					.07		.54		7.41
Oneonta	do	.80	.12				.15	.53			.40		.30	.03	.78		.47	2.73			.29	.04	2.00	.40				1.72		.30		11.06
Opelika ‖	Tallapoosa								.26		.12	.24		.19		.20	.80	2.42	T.		.86	2.00	T.	1.47					T.		.65	9.21
Ozark ‖	Gulf of Mexico											.80		1.30				1.53	.25		1.32	2.50	T.	.35							.15	8.20
Prattville	Alabama		.10				T.	.24			.52		.02		1.92	1.29	.37	3.09			1.90	1.32	1.40					.18	T.	1.15		13.50
Pushmataha	Tombigbee		.23					.43			.73		.70	.29	.14	1.55	.82	.28			2.00	.69	1.48					T.		.38		9.72
Selma ‖	Alabama	.01	.12						.22	T.	.20	.43		.12	.01	.16	.88	3.82		T.	2.10	1.27	.58	1.00				T.	.03	.32	.73	12.00
Spring Hill ‖	Gulf of Mexico		T.						.02			1.05		4.90	.20	T.	2.90	1.96	T.		.35	3.30	T.							.16	T.	14.84
Talladega	Coosa	.20	.05					.20			.28		.45			1.20	1.66				.82	T.	.96					1.20		1.25		8.27
Tallassee ‖	Tallapoosa	T.		.03					.25		.04	.35		.39		.17	.68	2.60	.23		.85	2.14	.11	2.15					.05	.02	.43	10.49
Thomasville ‖	Tombigbee		.12								.32	.73		.86	.06	T.	3.56	3.71	T.		1.57	.66	T.	.49				T.		.21	.24	12.53
Troy	Escambia							.02			.50		.30	.25	T.	.05	.10	2.85			1.79	1.34	.86							.78		8.84
Tuscaloosa ‖	Black Warrior	.51	.33					.08	.26		.23	.34		.33	.19	.52	1.81	2.09	.13		.59	.14	1.38					.02	.40	1.06		10.41
Tuskegee	Tallapoosa							.24			.47			.10		.75	4.52				3.08	.99	1.13							1.14		12.42
Union Springs ‖	do			.10					.17			.25		.20			1.10	4.16	.06		1.30	2.31	1.50	1.35					T.		.52	13.02
Uniontown	Black Warrior							.32			.63	.16	.26		.25	.91	2.67	.55			2.14	.52	.70							.30		9.41
Valley Head	Coosa		.48				T.	.33			T.		T.		T.	.45	.95	T.			.23	T.	1.50				T.	1.66		.34		5.94
Wetumpka ‖	do								.22			.40		1.06		T.	.27	2.60		T.	1.52	1.88	2.00								.94	10.89
Mississippi.																															
Aberdeen ‖	Tombigbee	1.51	.42					.73			.38			.09	.84		2.34	1.68			.43	.04	1.17					.20	2.06	.68		12.57
Agricultural College	do	.45	.35				.10	.40			.25		.45	.37	.15	1.40	4.40	.01			.66	.05	1.65	T.			.01	1.55	.25	.40		12.90
Bay St. Louis	Coast	T.	.01					.30			.45		3.29	2.48	.35	2.51	.22	4.02			1.24	1.16								.10		16.13
Bay Springs	Leaf	.01							.06		.07		1.05	.02	.03	3.00	1.01				.09	.02	.05							.06		5.47
Biloxi	Coast								T.		2.20	.02	4.22	1.72	.23	.64	1.70	3.70			1.30	2.50								.06		18.29
Booneville	Tombigbee	.18					.31	.74			.17		.05	.49	.21	.06	.77				.13		.70				.02		T.	1.70	.05	5.58
Brookhaven ‖	Pearl	T.	.07						.27		.61	.15	.55	2.44			1.87	.90			.28	.22	.08					T.		.43		7.87
Columbia ‖	do	T.	.19						.60		.39	.12	.02	4.14	.16	.02	3.12	3.03	.02		.44	2.64	.12					.03		.20		15.24
Columbus ‖	Tombigbee	2.04	.38					.44	.20		.20	.16		.08	.58		1.30	2.10			.62	.08	2.06					T.	1.02	.10		11.36
Crystal Springs ‖	Pearl	.02	.37					.65			1.20			1.61	.09		3.90	.76		.15		.30	.08					.20		1.80		11.13
Edinburg	do	.12	.31				T.	.70			.82		.72	.19	.15	.02	2.00	2.62			.71	.12	.28					.05	.20	.18		9.19
Enterprise ‖	Chickasawhay	.06	.24						.54		.42	.34		1.80	.16		1.84	1.52			.84	.43	1.24					.04		1.46		10.93
Fulton ‖	Tombigbee	1.46	.14					1.17			.30			.04	.61	1.45	1.02	1.15			.35	T.	.60					1.45	.55	1.60		11.89
Hattiesburg ‖	Leaf	T.	.14						.16		T.	.18		4.22	.52	T.	1.38	.86			.98	.58	T.							T.		9.02
Hazlehurst ‖	Pearl	.04						.68	.21		3.20	.09		1.64	.10		2.78	.00			.04	.61	.10					.13	.08	2.80		13.10
Hickory ‖	Chickasawhay		.52					.84			1.10		.85	.26		1.88	1.08	.30			.70	.33	.63					.16		1.26		9.91
Jackson	Pearl	.10	.38				.01	.82			.54		.94		.04	2.51	.51	T.			.77	.10	.20				T.	T.	.40	.46		7.78
Lake ‖	do	.38	.20					.70	.10		.70	.40		1.05			2.95	.60			.40	.30	.30					.98		.45		9.51
Laurel	Leaf	.01	.25				T.	.37			.88	.01	1.50	.62	T.	.70	1.50	1.53			1.08	.48	.15				T.	1.32	T.	.35		10.75
Leaksville ‖	Chickasawhay		.10						.45		.22			3.50	.18		.67	2.23			2.55	5.60										15.50
Louisville	Pearl	.43	.53			.03	.52				.21		.44	.05	.11	1.60	3.31				.29	.09	2.04					.90		.11		10.66
McNeill	do		.17					.03			.13		2.68	1.76	.27	.78	2.79	.10			.55	1.04					T.		.12	.97		11.39
Macon ‖	Tombigbee	1.10	.36					.22	T.		.25	.40		.60	.52	.02	1.35	5.25			.40	.15	.65						.02	.44	.15		11.88
Magnolia	Pearl		.32				T.	.07			.40		2.50	1.48	T.	.25	1.57	.63			.04	1.93	.04				T.	T.	.04				9.27
Meridian	Chickasawhay		.21				T.	.63		T.	.90		.75	.20		1.58	1.13	.29		T.	1.43	.28	.44				T.	.01		1.59		9.44
Merrill ‖	Pascagoula		.04						.32		.12	.04	.44	3.90	.60		3.60	3.42	.02		2.42	4.64	.06					.08		.44	.02	20.16
Monticello	Pearl	.19	.30				T.	.14	.02		.60	.04	2.34	.28	.08	1.31	1.02	.42			.35	1.19	.05				T.	T.	.01	T.		8.34
Okolona	Tombigbee	2.55	.28					.80			.30			.58	.28		1.03	1.21			.47	.05	.66					.54	1.60	2.15		12.50
Pascagoula	Coast		.04								.14		.58	3.20	.13		.49	1.48			.62	1.42								.06	.03	8.19
Pearlington	Pearl							.49	.05	T.	.60		2.10	2.30	T.	2.50	.65	1.70			1.60	.68					.10			.37		13.14
Poterville	Tombigbee	.06	.31					.67			1.00		.33			2.54	1.62	.13			.95	.28	1.45					.24		.44		10.02
Shubuta ‖	Chickasawhay	.02	.12						.44		.40	1.10		1.60	.21	.05	2.81	3.05	.01		1.38	.37	.04						.02	.82		12.44
Tupelo	Tombigbee	.62	.27				.05	.95			.40		.10	.09		3.14	1.20			T.	.40		.51				.01	2.97		1.55		12.26
Waynesboro ‖	Chickasawhay		.20					T.	1.30		.80	.20	T.	2.40	.30	.10	1.10	1.40	T.		2.73	.58	T.					T.	T.	.79		11.90

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations, April, 1912. District No. 2, South Atlantic and east Gulf States.*

Date.	Virginia.								North Carolina.																		Charleston, S. C.	
	Hot Springs.		Lynchburg.		Norfolk.		Richmond.		Charlotte.		Edenton.		Fayetteville.		Hatteras.		Newbern.§§		Raleigh.		Reidsville.		Salisbury.		Wilmington.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	62	32	74	48	79	53	79	50	61	54	79	53	78	47	69	56	81	50	71	56	67	51	70	40	76	56	76	60
2....	68	48	73	43	82	62	76	56	76	54	85	61	84	59	71	64	81	60	79	58	76	55	77	52	78	64	74	65
3....	48	25	52	38	68	42	56	39	58	41	72	44	75	43	64	47	66	43	60	41	73	38	73	38	68	48	67	54
4....	60	19	65	34	60	40	63	34	64	40	61	36	67	37	51	44	66	36	63	39	66	36	65	33	57	42	60	50
5....	65	29	70	45	70	46	71	46	67	44	72	46	72	36	66	51	73	40	69	45	69	43	69	43	67	50	69	55
6....	70	32	77	49	76	53	77	50	72	51	76	54	74	59	69	59	76	49	73	51	75	46	75	54	72	57	73	60
7....	64	37	64	43	69	49	65	47	67	47	72	58	72	52	70	50	72	52	68	47	65	49	65	51	71	53	74	63
8....	48	24	59	38	56	42	59	36	59	39	67	38	62	38	52	45	64	39	58	40	63	37	63	36	58	44	68	50
9....	67	23	72	36	67	39	69	35	69	43	70	37	72	35	65	51	70	37	69	44	70	36	66	32	66	42	64	50
10....	63	44	73	53	73	53	74	54	70	53	74	54	73	52	68	59	74	51	72	55	77	49	74	54	71	56	67	60
11....	73	41	75	40	68	47	74	44	78	51	70	45	81	49	67	56	76	48	77	52	79	49	76	44	72	54	68	60
12....	76	35	82	47	81	54	82	50	79	57	83	53	85	49	75	58	82	44	81	55	80	52	80	44	77	50	73	56
13....	71	45	77	61	74	59	74	60	69	60	74	59	70	57	72	61	72	51	70	60	73	61	71	58	70	61	67	63
14....	65	52	66	53	73	58	74	52	74	59	77	60	77	58	74	60	73	55	76	59	74	58	75	60	72	62	77	64
15....	76	48	80	59	80	60	79	59	80	61	82	59	86	62	75	63	78	58	81	63	84	62	82	59	76	64	74	66
16....	75	48	78	65	79	61	79	64	71	62	82	62	77	62	75	64	80	56	78	64	76	62	74	61	75	64	74	68
17....	72	51	76	64	77	65	76	65	76	63	79	65	83	65	71	67	77	61	77	65	76	64	77	63	77	66	81	68
18....	65	45	78	49	73	58	78	55	75	54	75	65	80	62	70	64	74	62	80	62	80	60	79	61	78	66	79	65
19....	56	30	63	45	64	51	64	47	69	44	70	53	73	48	66	57	70	50	67	47	73	42	78	43	71	54	73	56
20....	55	29	60	43	60	47	61	42	58	47	65	45	63	45	63	54	70	43	61	47	59	45	62	47	68	56	67	59
21....	55	30	58	43	57	51	59	47	58	51	62	51	60	47	71	56	63	51	59	53	58	50	60	51	64	56	66	60
22....	71	45	71	55	67	55	66	55	71	56	71	53	74	58	72	61	75	56	72	57	73	55	68	50	76	59	75	64
23....	55	34	64	46	67	55	66	48	69	49	73	56	71	54	71	61	73	53	67	52	70	46	67	50	71	56	73	61
24....	65	28	73	36	70	46	71	37	71	45	75	48	75	42	68	56	77	40	72	48	73	39	73	39	70	50	71	58
25....	70	31	76	46	64	50	71	51	79	48	74	59	82	48	72	60	81	47	78	51	84	45	79	45	78	56	76	60
26....	62	45	67	51	70	50	70	48	73	56	78	60	78	52	70	59	76	50	74	51	73	53	75	55	73	57	75	68
27....	68	49	74	59	74	61	69	59	65	59	69	53	78	52	75	64	78	55	70	60	73	59	70	59	76	63	78	67
28....	69	41	71	47	62	48	68	50	79	55	75	55	83	54	66	58	76	54	75	57	75	50	79	50	72	59	77	64
29....	69	30	70	53	83	48	73	47	80	63	80	55	88	57	77	63	85	52	83	55	77	58	81	61	79	60	70	69
30....	67	45	67	48	64	49	63	47	78	59	65	50	82	62	77	52	82	59	78	62	77	60	81	62	81	63	88	73
Mns..	65.0	37.2	70.2	47.9	70.2	51.7	70.2	49.1	70.5	52.2	73.6	52.9	75.8	51.4	69.1	57.3	74.7	50.1	71.9	53.2	72.9	50.4	72.8	49.8	72.0	56.3	72.7	61.2

Date.	South Carolina.														Georgia.													
	Columbia.		Conway.§§		Ferguson.§§		Georgetown.		Greenville.§§		Newberry.		Society Hill.		Albany.§§		Atlanta.		Augusta.		Dahlonega.		Macon.		Rome.§§		Savannah.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	80	60	78	63	79	57	79	57	65	52	69	57	77	61	88	61	79	55	82	59	70	51	83	59	82	54	77	62
2....	80	63	86	64	74	60	79	45	77	52	79	58	82	45	77	64	73	47	78	62	70	57	78	55	75	54	81	65
3....	63	46	.....	49	65	50	71	45	66	32	68	43	61	42	68	49	61	39	65	49	58	38	65	46	68	38	67	53
4....	66	44	67	.....	69	41	62	44	67	35	67	40	64	41	74	45	66	45	68	47	64	35	71	42	73	38	64	52
5....	72	46	74	38	74	41	62	41	71	38	76	43	70	51	78	53	70	49	73	48	67	44	72	51	75	43	72	64
6....	76	54	78	48	78	47	82	52	77	44	78	48	75	57	79	60	73	52	76	54	73	44	77	55	73	39	74	58
7....	76	53	70	40	78	52	69	49	67	54	75	59	81	42	74	57	63	45	76	54	64	49	73	50	60	52	75	61
8....	62	43	68	36	66	46	62	45	65	40	64	37	61	36	80	45	65	40	66	46	65	36	67	44	68	43	65	51
9....	72	40	70	40	75	38	67	39	72	34	76	38	70	53	84	60	71	49	73	43	70	38	74	42	78	36	67	52
10....	70	56	84	49	70	44	71	60	73	42	72	52	72	50	70	62	65	54	68	59	68	47	66	58	68	42	70	61
11....	80	55	81	57	82	58	76	61	81	42	81	52	77	50	79	62	80	54	78	55	78	48	80	55	83	48	72	61
12....	82	55	84	45	85	49	80	50	82	56	84	54	80	60	85	64	78	61	81	57	79	51	81	60	83	51	77	56
13....	66	62	80	52	66	53	76	63	73	57	73	62	69	59	83	65	73	59	68	61	72	58	74	63	81	56	74	64
14....	77	62	85	55	80	60	78	63	76	58	76	62	78	60	82	61	76	62	76	62	71	60	78	61	76	51	79	63
15....	81	63	85	60	80	62	78	63	79	58	82	59	81	62	88	62	78	59	81	64	76	60	83	64	79	61	78	65
16....	78	64	79	60	82	64	78	64	68	59	74	63	78	64	89	68	72	61	80	64	64	59	80	64	73	63	79	67
17....	81	65	86	64	80	65	80	68	76	59	78	64	79	60	78	70	75	61	77	64	69	61	74	65	77	61	81	64
18....	79	61	85	61	81	64	82	64	75	59	77	62	79	49	79	63	65	47	78	60	67	52	75	57	69	51	82	65
19....	73	48	76	55	75	52	73	54	72	40	73	43	70	49	76	54	68	40	74	50	71	37	75	48	72	28	75	57
20....	59	52	66	48	61	49	72	52	55	41	62	50	62	53	74	60	62	50	58	53	61	47	60	54	58	47	62	56
21....	61	54	69	56	70	55	66	58	60	46	60	53	64	56	71	62	61	50	64	55	64	49	73	55	69	50	66	59
22....	74	60	78	58	78	58	79	62	77	50	76	59	73	53	77	62	78	55	76	63	76	65	79	64	82	56	76	63
23....	70	53	76	56	72	56	73	60	72	42	72	50	68	44	73	56	67	46	73	56	69	45	72	51	70	45	74	61
24....	77	49	85	43	77	46	76	47	75	40	77	45	70	50	79	51	73	52	77	49	73	41	77	46	79	42	75	58
25....	80	54	80	47	82	48	82	51	80	42	82	45	77	54	82	55	76	61	78	51	74	42	78	49	81	46	78	59
26....	76	58	80	46	78	52	80	54	75	44	79	56	77	57	83	61	74	59	77	60	73	57	78	62	80	53	76	64
27....	75	60	84	56	75	56	83	63	66	56	73	58	75	55	85	65	65	57	76	60	68	55	71	58	82	57	84	65
28....	80	56	82	54	85	55	81	64	79	56	82	53	78	61	89	62	78	55	82	58	74	50	82	58	83	55	80	64
29....	83	64	89	54	87	64	82	63	73	63	82	65	84	63	89	67	73	62	85	66	70	60	84	68	79	58	84	69
30....	82	67	.....	62	88	69	81	64	82	56	84	63	81	54	85	67	73	59	82	64	76	55	81	63	78	59	85	72
Mns..	74.4	56.6	78.8[b]	52.3[a]	76.4	53.7	75.3	56.2	72.6	48.2	75.0	53.1	73.6	53.0	79.9	59.8	71.0	52.8	74.9	56.4	69.8	49.7	75.4	55.6	75.1	49.9	75.0	60.7

TABLE 3.—*Maximum and minimum temperatures at selected stations, April, 1912. District No. 2*—Continued.

Date.	Georgia.						Florida.																			
	Thomasville.		Waycross.§§		West Point.§§		Bartow.§§		Fort Myers.		Gainesville.§§		Jacksonville.		Key West.		Miami.		Ocala.§§		Orlando.		Pensacola.		Tallahassee.§§		Tampa.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	83	59	84	56	82	53	87	66	86	65	84	60	82	62	82	74	82	73	88	64	89	58	73	65	82	62	85	66
2	80	60	81	57	80	59	88	65	84	66	85	69	83	66	82	76	84	74	75	62	87	68	77	57	80	63	82	71
3	67	46	68	52	66	42	78	64	76	66	73	60	69	56	85	74	89	71	78	46	82	61	69	50	68	52	77	57
4	73	43	74	43	70	41	76	55	79	58	75	49	70	51	78	71	74	70	77	52	76	49	69	56	74	48	76	54
5	75	51	74	48	73	48	79	55	80	58	73	55	71	58	78	68	78	70	84	53	78	54	68	57	77	50	79	59
6	79	55	78	50	77	49	79	52	80	58	79	54	75	58	78	69	78	69	84	56	81	53	71	63	77	55	78	60
7	81	60	82	58	70	60	82	53	83	59	83	58	80	61	79	70	79	71	79	60	84	55	73	57	79	58	81	60
8	71	51	68	54	65	43	83	59	85	62	72	61	68	59	80	71	82	63	84	55	81	61	67	51	70	52	81	63
9	68	48	78	43	75	39	80	64	82	65	83	55	73	53	79	72	83	72	88	61	78	64	66	57	78	55	80	64
10	69	63	71	58	65	50	84	63	82	66	80	63	78	64	82	73	82	71	86	65	85	62	70	63	73	58	80	65
11	79	62	78	62	80	57	81	65	80	66	83	65	72	61	83	74	83	65	85	63	84	65	71	62	78	62	82	67
12	83	58	83	56	81	56	86	60	84	68	85	60	79	59	83	73	83	65	86	67	83	66	66	62	81	62	84	65
13	69	64	74	66	74	62	85	64	85	66	77	63	76	67	83	76	84	74	88	65	87	68	70	62	75	63	82	67
14	82	63	85	56	80	60	88	67	85	69	84	64	82	66	83	76	83	70	90	65	84	68	75	67	80	64	84	67
15	88	64	89	62	82	60	91	62	88	69	86	64	82	63	84	76	86	68	89	66	89	63	74	67	84	65	88	66
16	86	67	88	68	78	62	92	66	89	71	86	66	86	68	84	76	85	76	89	69	91	67	72	67	83	66	88	70
17	77	62	82	69	75	63	90	70	87	71	89	69	85	69	84	77	85	77	80	69	91	73	74	66	77	67	86	73
18	81	56	83	63	72	56	78	73	84	71	82	66	83	68	84	77	86	74	88	60	85	74	75	60	80	63	78	66
19	77	53	79	57	75	45	77	65	86	72	79	56	76	61	86	78	87	73	88	60	78	64	75	55	78	56	75	62
20	70	62	64	58	59	49	91	62	90	67	87	62	81	63	85	78	86	78	88	67	91	62	75	64	75	60	88	65
21	72	61	68	54	74	53	92	67	89	67	78	66	78	63	85	78	85	78	88	67	90	65	73	61	71	62	85	68
22	83	66	80	61	82	59	93	69	89	73	87	60	87	66	87	78	86	78	81	66	92	68	76	71	81	61	85	75
23	76	52	76	62	71	49	91	69	90	71	81	72	77	62	86	77	88	73	82	54	87	68	75	60	75	62	85	69
24	78	49	78	51	78	46	81	66	87	69	82	56	75	60	86	78	87	72	84	58	81	62	74	61	78	56	82	66
25	81	54	80	53	79	48	83	60	87	70	83	59	78	63	85	77	78	70	90	61	82	60	72	62	81	62	82	63
26	83	60	81	57	78	57	86	61	90	69	84	60	78	67	85	77	81	75	89	63	85	64	73	70	80	64	87	64
27	86	64	87	62	69	63	91	61	89	70	88	61	85	66	85	78	83	75	88	65	90	62	78	69	84	67	90	64
28	88	63	86	62	83	56	88	66	90	69	88	65	85	68	85	77	85	75	89	65	87	67	77	69	83	65	87	71
29	85	67	86	68	72	62	90	64	87	69	85	66	84	69	84	78	84	77	89	71	87	65	75	70	84	69	85	71
30	87	63	87	67	81	58	92	69	88	72	85	71	83	69	85	77	84	75	.....	69	90	72	79	67	86	71	85	74
Mns..	78.9	58.2	79.1	57.8	74.9	53.5	85.4	63.4	85.4	67.1	82.2	61.8	78.7	62.9	83.2	75.1	83.3	72.4	85.3[a]	62.1	85.2	63.6	72.7	62.3	78.4	60.7	82.9	65.7

Date.	Alabama.																Mississippi.							
	Anniston.		Bermuda.		Birmingham.		Eufaula.§§		Mobile.		Montgomery.		Tuscaloosa.§§		Uniontown.		Columbus.§§		Hattiesburg.§§		Jackson.		Meridian.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	82	54	84	51	81	52	83	54	75	64	84	58	82	46	84	56	81	54	84	62	83	61	82	57
2	70	48	75	62	70	46	77	56	74	55	71	51	70	58	80	53	65	57	72	67	75	53	72	48
3	64	39	68	44	67	39	66	43	70	49	68	44	68	40	73	43	69	39	72	42	70	40	68	42
4	72	40	76	42	73	48	69	38	72	51	72	47	73	42	75	43	76	45	70	41	78	45	74	44
5	72	55	77	57	73	56	73	43	73	54	75	54	77	43	78	50	77	49	82	52	80	55	77	52
6	71	53	75	48	68	56	76	48	72	60	76	54	70	54	73	52	69	57	80	54	73	62	72	58
7	63	46	74	53	62	45	76	50	70	56	73	49	59	54	75	53	60	49	70	56	70	52	64	48
8	67	43	69	45	68	40	68	41	68	52	68	45	68	44	76	43	68	41	72	48	70	46	66	45
9	74	43	74	42	74	48	73	40	71	51	73	47	76	40	73	42	74	42	78	42	72	42	72	41
10	64	54	68	59	63	56	68	48	73	63	67	61	69	41	83	59	73	53	78	48	81	58	67	59
11	80	52	82	56	78	54	76	58	79	64	79	62	80	54	82	57	82	55	76	62	87	60	80	58
12	78	57	76	60	77	62	79	55	68	61	80	62	78	57	77	59	73	60	70	58	78	62	68	61
13	77	62	75	61	73	62	70	57	75	63	73	63	76	59	87	61	73	63	76	56	83	62	76	61
14	79	62	84	61	79	62	79	56	76	65	83	60	82	61	76	62	83	61	80	62	89	67	85	65
15	72	60	80	65	71	60	81	60	74	64	78	63	68	63	77	62	68	66	72	68	78	64	71	61
16	72	61	75	62	66	60	77	62	73	64	73	62	66	58	81	59	64	58	68	62	71	64	71	61
17	77	60	77	65	76	57	71	59	79	65	77	64	78	59	77	64	76	60	80	60	75	63	78	56
18	67	48	72	53	67	48	71	57	75	58	69	55	68	50	77	50	66	48	72	51	71	41	69	49
19	71	39	76	49	72	42	75	47	78	58	73	49	75	44	75	48	74	43	72	51	76	51	70	48
20	64	52	68	58	63	53	61	50	74	61	64	54	66	45	76	54	72	47	78	54	72	56	66	54
21	74	53	74	61	76	55	71	53	73	60	73	56	76	54	84	55	76	54	80	62	79	60	75	58
22	81	56	84	70	80	56	80	58	87	70	82	62	83	60	79	66	79	60	80	64	80	68	81	59
23	70	44	75	54	72	46	72	51	75	59	73	53	76	49	80	50	74	45	76	54	75	51	71	50
24	77	42	80	45	77	50	76	44	79	55	78	51	80	47	84	48	80	46	84	56	84	48	77	46
25	78	48	83	49	79	58	77	46	76	59	81	55	83	50	80	56	81	50	85	52	83	57	82	54
26	78	64	76	62	77	64	77	50	75	68	76	65	81	51	84	56	80	54	87	55	86	68	81	65
27	69	56	79	64	70	59	76	60	80	69	77	61	73	68	85	59	71	66	89	72	88	71	85	65
28	82	57	83	57	81	59	82	57	79	68	85	60	84	60	86	60	82	61	90	74	88	68	85	63
29	79	61	83	68	81	63	80	64	82	72	82	69	84	64	80	59	81	62	88	73	82	64	82	63
30	72	53	81	59	74	55	80	60	78	64	77	61	75	55	79	55	75	50	87	72	77	55	78	55
Means	73.2	52.1	76.8	56.1	72.9	53.7	74.7	52.2	75.1	60.7	75.3	56.6	74.8	52.3	79.2	54.5	74.1	53.2	78.3	57.7	78.5	57.1	74.8	54.9

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 3, OHIO VALLEY.

Prof. FERDINAND J. WALZ, District Editor.

GENERAL SUMMARY.

The weather during April was slightly warmer than the normal for this month, and was in marked contrast in that respect with the three months preceding. Like March, however, it was excessively wet, the most important feature of the month being the unusually large number of rainy days and the large amount of precipitation which fell over nearly all the district and particularly the central and southern portions. The persistence of the rainy weather was exceedingly detrimental, keeping the ground practically water soaked and greatly hampering all farming operations, the season at the end of the month being further behind than for many years past. The cultivation of the soil and planting of staple crops to any great extent was rendered practically impossible. The early potato crop will be practically a failure on this account, and little or no progress could be made in the preparation of ground for the planting of corn or other crops usually put out in April or early May. Wheat and clover wintered badly and many fields are a total failure. On account of the wet weather which prevailed through both March and April, a very small acreage of oats has been sown, and that sown is not in good condition. Floods and freshets occurred in many of the rivers and streams, and lowlands were flooded several times during the month, not only preventing work in them but destroying much of the work that had been done. On account of the absence of harmful temperatures the outlook for fruit and berries is exceedingly favorable, except peaches, which had been damaged by the low temperatures of the winter.

The general rainy conditions which prevailed so largely during the month of March continued practically through April. In all there were seven distinct storm areas of marked energy that passed over the Ohio Valley or near enough to affect the weather conditions in the district. They were as follows: (1) The month began with a general rainstorm, which developed over the central Rocky Mountain Plateau and moved to the central States during the latter part of March in progress across the central valleys and headed for the New England coast. This storm brought general and heavy rains to the Ohio Valley during the period 1st–3d. (2) During the 7th a well-developed storm center passed across the Lake region from the Canadian northwest, causing general rains over the district. (3) In the period 13th–15th, a storm of marked intensity moved from the eastern slope of the Rocky Mountains slowly northeastward over the Lake region, causing general rains in the Ohio Valley. (4) From the 16th to 18th a general storm area which had developed over Texas moved northeastward to the lower Lake region accompanied by general rains, the rainfall being especially heavy in the Ohio Valley. (5) On the 21st and 22d a storm from the southern Rocky Mountain slope moved northeastward across the central valleys and lower Lake region attended by general and heavy rains. (6) On the 26th and 27th a storm from the central Rocky Mountain Plateau moved across the upper Mississippi Valley and Lake region with a deep trough extending southward into the Ohio Valley and attended by general and heavy rains. The rainfall was especially heavy in Tennessee. (7) In the period 28th–30th a storm from the southern Rocky Mountain Plateau moved from the southwestern States nearly due eastward across the central Mississippi and on through the Ohio Valley to the central Atlantic coast attended by general and excessive rains over the entire district.

The following table summarizes the chief features of meteorological interest for the several sections of the district:

Portions of States included in the Ohio River Basin.	Temperature.				Precipitation.						
	Average.	Departure.	Highest.	Lowest.	Average.	Departure.	Greatest monthly.	Least monthly.	Greatest in 24 hours.	Average number of days.	Average snowfall.
New York	45.8	+2.1	78	19	4.78	+1.98	5.08	4.52	1.55	11	8.3
Pennsylvania	51.0	+3.0	83	21	4.51	+1.15	5.91	2.51	1.60	15	1.6
Maryland	50.2	+4.8	79	21	4.26	+0.56	4.73	3.66	0.88	17	0.5
West Virginia	55.6	+4.1	88	20	4.36	+0.57	8.00	1.99	2.52	13	0.2
Ohio	53.1	+2.9	88	15	4.80	+1.75	8.10	3.36	2.48	12	1.3
Indiana	54.5	+2.5	87	13	5.43	+2.18	8.66	2.21	3.19	12	0.6
Illinois	56.2	+2.6	86	27	5.77	+1.98	7.06	4.29	2.90	12	0.2
Kentucky	58.4	+2.4	87	25	7.87	+4.22	13.66	5.18	6.30	12	T.
Tennessee	60.3	+3.1	88	22	9.50	+5.16	14.80	5.16	4.50	13	0
Alabama	61.6	+0.8	87	31	8.24	+4.08	9.67	6.72	2.80	14	0
Georgia	59.9	+3.3	82	28	8.13	+2.89	10.72	5.54	2.80	12	0
North Carolina	55.2	+3.1	85	20	5.33	+1.42	7.59	3.06	3.00	11	0
Virginia	54.7	+3.5	81	21	5.96	+2.44	10.47	3.20	3.04	11	T.

TEMPERATURE.

When the month opened the severe cold weather which had so largely prevailed during much of the period since the first of the year had seemingly passed, the temperature over the district generally being moderately high for the season. A sharp change to colder, however, set in by the morning of the 2d following the passage of a deep barometric depression, and during the 2d and 3d mean temperatures were considerably below normal with minimum temperatures below freezing and frost occurring quite generally. It continued unseasonably cold over much of the district until the morning of the 4th. High temperatures prevailed on the 4th, 5th, and 6th, maximum temperatures of 70° and over being reached on one or more of those days in most sections of the district. This was followed by a quick reaction to colder, and during the 8th and 9th temperatures were again unseasonably cold. Beginning with the 9th and continuing until the 16th there prevailed a period of unusually high temperatures, the longest and most favorable period of warm weather that had obtained so far during the entire year. A reaction to colder followed the passage of a barometric disturbance on the 17th and the period 17th–19th was generally cold and disagreeable. Nearly normal

temperature obtained during the last decade except on the last day, when it was unseasonably cold.

For the month as a whole the temperature averaged from 1° to 5° above normal in the various parts of the district, the greater departures, as a rule, occurring over West Virginia and the upper portions of the Ohio Valley proper, and the smaller departures over the Tennessee River Valley.

PRECIPITATION.

Precipitation was above normal in all parts of the district, except over a few local areas in West Virginia and in northern Indiana. Over much of the district it was more than double the normal. It was notably heavy over the central and southern parts of the district, but especially over western Tennessee. The total for the month was distributed about as follows: 4 to 6 inches over practically all of the district north of the Ohio River, except that over southern Indiana and extreme southern Illinois it was from 6 to 8 inches; 3 to 6 inches over the eastern portion of the district from southwestern New York southward to southwestern North Carolina; 6 to nearly 14 inches in Kentucky; 8 to nearly 15 inches in Tennessee, and 7 to nearly 9 inches in Alabama. The least precipitation at any station in the district during the month was 2 inches at Sutton, W. Va., the greatest 14.8 inches at Perryville, Tenn.

Over Tennessee and much of southern Kentucky the precipitation was the greatest of record for April in those sections, while over other large areas in the central and southern portions of the district the rainfall of this month has rarely been equaled in April. In Tennessee out of a total of 55 reporting stations 24 had a rainfall of more than 10 inches.

While rains were very frequent and fairly well distributed through the month, there were several periods with general and heavy rainfalls, viz, 1st to 3d, 7th, 12th to 18th, 22d, and 26th to 30th. On the 2d and 3d and again on the 27th and 29th a number of stations in Tennessee reported 24-hour rainfalls ranging from 2.5 to 4 and 4.5 inches. The greatest 24-hour rainfall, however, was 6.30 inches at Hopkinsville, Ky., on the 2d. This is one of the largest, if not the largest, 24-hour rainfall ever recorded in that State.

Snow fell over much of the more northerly sections of the district during the first two or three days of the month. The amount in western New York was from 5 to 13 inches and in western Pennsylvania, north-central Ohio, and east-central Indiana 1 to 5 inches, but in other sections it was mostly inappreciable and melted as it fell. No snow fell south of the Ohio River other than flurries in the mountain section of West Virginia.

RIVERS AND FLOODS.

Upper tributaries of the Ohio.—In the Monongahela, Youghiogheny, and Kiskiminitas Rivers moderate stages prevailed during the month. In the Allegheny stages were high during the first 5 days, flood height being nearly reached in the lower portions on the 3d. Heavy rains in the early part of April caused marked rises in the Big Sandy, Guyandotte, and Great Kanawha. Tributaries in Ohio were at good stages, but no floods occurred. In the Licking and Kentucky Rivers there were rapid rises from the heavy rains that fell during the first week and again at the end of the month. In the Kentucky River flood stage was not passed at any station below Beattyville. At Beattyville the Kentucky rose from 11.5 feet at 7 a. m. of the 2d to 35.5 feet, or 5.5 feet above flood stage, by the morning of the 3d, a rise in 24 hours of 24 feet.

Wabash River.—Over the lower Wabash River Basin of Indiana and Illinois, extending from about Mount Carmel, Ill., at the mouth of White River, to the Ohio River, the loss from high water and flooding is estimated to be between $100,000 and $200,000. Crops and railroads suffered extensively, and business was largely suspended. Besides, there was much damage to the lands by erosion which can not be estimated.

Cumberland River.—There were two sharp floods in the Cumberland River during April resulting from the heavy rains during the first and last 3 or 4 days of the month. At Burnside, Ky., the river rose from a stage of 18.5 feet on the 1st to 60.8 feet on the 3d, and again from 8.4 feet on the 26th to 39.2 feet on the 28th. The flood stage at Burnside is 50 feet. The highest water reached there since records began in 1885, is 65.0 feet, March 30, 1902. At Carthage, Tenn., 49.2 feet was reached April 4, which is within 1.2 feet of the record high water at that station and 9.2 feet above flood stage. At Nashville a stage of 46.6 feet on the 7th and 8th is the highest water at that station since 1897. From 1873, when records began at Nashville, to 1897, inclusive, this stage was exceeded during nine different floods. The flood stage at Nashville is 40 feet, and the highest water on record is 55.3 feet, January 22, 1882. At Clarksville, Tenn., the stage, 53.6 feet, reached April 4, is the highest water recorded at that station since its establishment in 1901.

The river remained above flood stage at Nashville and points below for a period of about 10 days during the first flood, and had again passed the flood stage at the end of the month and was rising quite rapidly from the headwaters down. The property loss is estimated to be several hundred thousand dollars, and many families were driven from their homes. The loss, however, would have been greater but for the timely warnings of the Weather Bureau, which resulted in a vast saving of property and life.

Tennessee River.—While the Tennessee River was high at Chattanooga, it did not reach the flood stage of 33 feet, the highest water being 30.2 feet on the 5th. In the lower reaches, however, from Florence, Ala., to the mouth the river was above flood stage during the first 10 to 15 days of the month, and in several of the reaches it had been above flood stage since near the middle of March. The damage from the floods in the Tennessee River, however, was inconsiderable, timely warnings having been given and all movable property placed in safety. The principal loss was to growing crops, railroads, washing of lands, and suspension of business.

Ohio River.—In the Ohio River proper, flood stages were reached at only a few stations above the falls at Louisville, and while the river was bank full or flooded, no damage of consequence resulted from high waters in the Ohio River as far down as Paducah. The official in charge of the Evansville river district, which extends from below the Falls of the Ohio at Louisville to Mt. Vernon, Ind., states:

> While the high water did undoubtedly cause more or less inconvenience to farmers in bottom lands, as well as to some residents of cities along the river, and in some cases necessitated a slight expense, it did not, so far as known, cause any material damage in the Evansville district. The consensus of opinion of those interviewed appears to be that the enormous benefit derived from this particular flood in the way of a deep, rich deposit of silt, deeper and richer than for several years past, over the immense areas of bottom lands in this district, outweighs a thousand-fold the minor damage done by erosion and washouts.

From Paducah, Ky., to Cairo, Ill., damage from overflow of the Ohio River and tributary streams was extensive and costly, particularly in hindering farming operations and the planting of crops, which had already been much delayed by the general wet weather and lateness of the season. The loss resulting from suspension of business and interference with railroad traffic was also large. A large area in western Kentucky and including several towns, the most important of which are Hickman, Columbus, and Wickliffe, was inundated by the breaking of levees and flooding from the Mississippi River. Thousands of families were rendered homeless and large sections of four counties in Kentucky were submerged. This was but a part of the great spring flood of 1912 in the Mississippi River, which in many places was one of the worst since the Mississippi Valley was settled, a full description of which will be published later as a special bulletin of the Weather Bureau.

MISCELLANEOUS.

Thunderstorms, wind squalls, hail storms, and damaging rains occurred with unusual frequency during the month and in various parts of the district. The more noteworthy and damaging events of this nature occurred as follows:

April 1 and 2.—Excessive rains fell over southern and western Kentucky and nearly the whole of Tennessee. These rains caused widespread damage by flooding the various streams and large areas of the lowland. Transportation facilities were crippled and several railroad wrecks resulted from washouts of tracks. In Tennessee the rains were attended by severe wind storms, the wind doing great damage in several counties. Barns and houses were blown down and trees uprooted and many houses unroofed. In Dixon County, Tenn., the wind made a clean sweep of everything in a path about 200 yards wide and several miles in length. Giant oaks, houses, and fences were blown in every direction and several barns were blown absolutely away. Several other instances equally severe were reported from other counties in that section.

April 14.—A large amount of damage was done in Ohio by severe thunderstorms which were quite general throughout the State, but which were especially severe in the north-central counties. The storms were accompanied by high winds and hail which broke down trees and stripped off young leaf and fruit buds. Many windows were broken by the hail. The hailstones were unusually large, some by actual measurement being 2.5 inches in diameter. A passenger train on the Erie Railroad was badly damaged by having all the windows broken by the hail and the passengers were injured by flying glass. The damage to greenhouses was extensive. On the same day thunderstorms accompanied by hail did local damage in various other sections of the district.

April 16.—A thunderstorm attended by hail and high winds did considerable damage at Maysville, Ky.

April 17.—An electric storm attended by high winds and severe lightning did extensive damage in Wood County, W. Va. A number of barns and outbuildings were blown down and fruit trees uprooted.

April 21.—Severe and destructive local storms of tornadic nature swept over many parts of Illinois in the late afternoon of this date. Several persons were killed and property loss of several hundred thousands of dollars was inflicted. The postmaster at Dale, Ill., reports having seen the funnel-shaped cloud that usually attends tornadoes. The width of the path of destruction in his vicinity was about 200 yards.

April 24–26.—Lightning struck a gasoline tank in a building adjoining a department store at Minard, Ohio, causing a fire which consumed 13 buildings and caused a loss of some $60,000. Violent thunder and wind storms occurred in Indiana during the night of the 24th–25th, and in Illinois the night of the 25th–26th.

April 26–29.—In this period severe local storms, attended by excessive rains, wind squalls, and lightning occurred in southern Indiana and quite generally over Kentucky and Tennessee, resulting in widespread damage, particularly from the floods of rain.

April 29.—The home of J. F. Stanberry, Knoxville, Tenn., was struck by lightning and partly consumed.

TABLE 1.—*Climatological data for April, 1912. District No. 3, Ohio Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
New York.																				
Allegany	Cattaraugus	1,441	6	45.9	.....	78	15	19	4	43	4.52	.....	1.55	13.0	11	10	8	12	nw.	Charles E. Whitney.
Bolivar	Allegany	1,800	18	45.6	+ 2.1	75	6	19	4	44	4.75	+ 1.98	1.34	4.6	8	5	14	11	w.	Charles F. Hoffman.
Olean	Cattaraugus	1,402	4	.....	.....	.....	.....	.....	.....	.....	5.08	.....	0.85	7.2	15	11	4	15	w.	John W. Alles.
Pennsylvania.																				
Aleppo	Green	1,135	11	53.5	+ 4.3	80	15	25	4	43	3.31	− 0.50	0.65	T.	13	10	8	12	sw.	J. S. Hinerman.
Baldwin	Butler	1,404	6	50.2[a]	.....	76	15	24	8	40	3.37	.....	1.50	0.5	12	11[a]	6[a]	12[a]	w.	S. H. Templeton.
Beaver Dam	Beaver	674	18	.....	.....	.....	.....	.....	.....	.....	4.45	+ 1.48	0.93	.....	15	6	7	17	sw.	U. S. Engineer.
Brookville	Jefferson	1,173	.....	49.6	.....	82	16	23	10	51	2.51	− 0.63	1.60	1.0	7	.....	.....	.....	w.	H. C. Bartholomew.
Clarion	Clarion	1,078	27	.....	.....	.....	.....	.....	.....	.....	4.62	+ 1.11	0.96	1.0	11	7	1	22	w.	J. A. Miller.
Claysville	Washington	1,127	8	54.6	.....	82	15†	25	4	42	4.90	.....	0.86	1.0	14	12	10	8	w.	E. T. Buchanan.
Confluence	Somerset	1,352	28	.....	.....	.....	.....	.....	.....	.....	3.11	− 0.37	0.82	T.	13	12	1	17	w.	Grant Pyle.
Franklin	Venango	955	38	48.4	+ 2.2	78	16	25	3†	37	5.89	+ 3.18	0.92	1.0	19	11	3	16	nw.	F. E. Dixon.
Freeport	Armstrong	772	39	.....	.....	.....	.....	.....	.....	.....	4.09	+ 0.83	1.39	.....	13	5	4	21	.....	Mrs. Anna R. Burtner.
Greensboro	Green	768	23	.....	.....	.....	.....	.....	.....	.....	4.02	+ 0.60	1.00	T.	17	11	5	14	sw.	James G. Cramer.
Greenville	Mercer	950	16	48.4	+ 2.6	80	15	25	3	46	5.00	+ 2.63	1.41	4.2	13	14	5	11	nw.	A. M. Orr.
Indiana	Indiana	1,350	15	51.6	+ 1.9	80	15	21	20	44	4.95	+ 0.77	0.73	0.5	15	16	6	8	s.	R. W. Wehrle.
Johnstown	Cambria	1,184	24	52.7	+ 3.2	83	15	28	8	42	5.00	+ 1.19	0.76	T.	19	5	12	13	sw.	E. C. Lorentz.
Lock No. 4	Washington	718	26	.....	.....	.....	.....	.....	.....	.....	4.66	+ 1.46	1.10	.....	16	8	6	16	s.	R. T. McGowan.
Lycippus	Westmoreland	1,420	20	52.9	+ 3.8	80	15	26	8	32	4.22	+ 0.63	0.66	0.7	15	.....	.....	.....	.....	Murray Forbes.
Pittsburgh	Allegheny	842	42	52.6	+ 1.6	80	15	29	3	35	4.32	+ 1.42	1.08	2.5	16	7	13	10	nw.	U. S. Weather Bureau.
Saegerstown	Crawford	1,116	21	48.1	+ 3.1	77	15	23	8†	43	5.66	+ 2.57	1.30	6.0	16	3	17	10	nw.	J. G. Apple.
Skidmore	Lawrence	1,000	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Stoner.
Somerset	Somerset	2,250	56	49.2	+ 3.1	79	15†	22	8	38	4.95	+ 0.48	0.85	T.	13	5	13	12	nw.	W. M. Schrock.
Uniontown	Fayette	999	24	54.7	+ 4.1	82	15	28	8	39	4.75	+ 1.07	1.26	1.0	17	14	6	10	nw.	Wm. Hunt.
Warren	Warren	1,137	23	47.0	+ 2.6	78	15	21	2	43	5.91	+ 2.77	1.10	7.0	17	10	1	19	nw.	Anna Simpson.
Maryland.																				
Deer Park	Garrett	2,457	18	50.2	+ 5.4	79	12†	21	8	52	4.38	+ 0.77	0.78	0.5	16	.....	.....	.....	.....	S. P. Specht.
Grantsville	do	2,351	18	50.0	+ 4.4	79	15	22	8	38	4.73	+ 1.33	0.88	.....	14	8	10	12	.....	J. S. Miller.
Oakland	do	2,461	12	50.4	+ 4.7	79	15	23	8†	48	3.66	− 0.42	0.84	1.0	20	8	14	8	w.	R. E. Weber.
West Virginia.																				
Bancroft	Putnam	574	10	59.2	.....	88	12†	28	8	51	4.92	+ 0.84	0.87	0	16	14	0	16	ne.	R. E. Dent.
Beckley	Raleigh	2,440	12	50.8	+ 2.0	80	16	20	7†	39	5.82	− 0.03	1.82	0	6	11	3	16	w.	John A. Ewart.
Bens Run	Pleasants	622	10	56.0	+ 4.7	82	12	28	4	41	4.28	− 0.25	0.80	0	14	15	7	8	.....	J. D. Riggs.
Bluefield	Mercer	2,563	17	55.6	+ 2.7	79	15	27	8	37	5.59	+ 2.13	1.62	T.	14	13	13	4	.....	Norfolk & Western Ry.
Buckhannon	Upshur	1,472	21	53.6	+ 2.8	83	15	25	4	50	3.32	− 0.98	0.80	0	11	16	7	7	.....	H. A. Darnall.
Cairo	Ritchie	667	10	56.3	+ 1.9	85	12†	25	4	45	3.77	− 0.06	1.15	0	13	4	24	2	w.	Van A. Zevely.
Central Station	Doddridge	900	11	55.4	+ 5.0	84	15	24	4	46	3.92	+ 0.97	0.97	T.	16	7	15	8	sw.	G. W. Sherwood.
Charleston	Kanawha	598	24	60.7	.....	84	12	31	4†	37	4.28	+ 0.66	1.32	0	15	13	11	6	w.	R. C. Hewes.
Creston	Wirt	612	11	57.3	+ 5.7	84	12	25	4	48	3.99	− 0.16	1.01	0	15	12	8	10	w.	J. M. Reed.
Cuba	Jackson	544	10	56.0	+ 4.1	83	15	24	4†	42	4.46	+ 1.19	1.08	0	12	12	14	4	sw.	C. T. Perry.
Doane	Wayne	.....	7	.....	.....	.....	.....	.....	.....	.....	6.42	.....	1.67	0	11	9	12	9	w.	L. A. Smith.
Elkhorn	McDowell	1,933	19	55.7	+ 2.8	81	15	27	8	39	7.16	+ 3.59	2.00	0	13	10	8	12	sw.	J. J. Lincoln.
Elkins	Randolph	1,940	13	52.7	+ 4.1	81	15	25	4	45	2.67	− 0.62	0.82	0.1	14	7	10	13	w.	U. S. Weather Bureau.
Fairmont	Marion	879	18	55.1	.....	84	15	26	4	47	4.04	+ 0.40	1.28	T.	18	15	5	10	s.	F. P. Hall.
Glenville	Gilmer	738	22	57.6	+ 5.0	87	12	24	4	49	3.15	− 0.63	0.60	T.	12	17	0	13	sw.	Joe N. Craddock.
Grafton	Taylor	985	18	56.5	+ 5.4	84	15	25	4	46	3.95	+ 0.57	1.01	0	16	14	6	10	w.	Joseph Gerken.
Green Sulphur Springs	Summers	1,600	16	55.1	+ 4.7	83	15	24	4	46	4.55	+ 1.33	1.53	T.	15	9	8	13	w.	Arthur George.
Hinton	do	1,400	21	56.8	+ 3.7	85	15	28	4	46	4.82	+ 1.52	1.26	0	11	13	5	12	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	.....	1	.....	.....	.....	.....	24[d]	3	.....	4.20	.....	0.75	4.0	9	11[a]	2[a]	16[a]	.....	R. C. Ferguson.
Huntington	Cabell	510	17	57.8	+ 4.5	83	16	30	4	38	5.34	+ 1.60	1.58	0	14	14	1	15	w.	L. H. Hutchinson.
Lewisburg	Greenbrier	2,200	11	54.2[a]	+ 4.7	80	15	24	4	43[a]	4.21	+ 0.85	1.34	T.	9	20[a]	6[a]	3[a]	se.	Geo. T. Argabrite.
Logan	Logan	665	10	60.1	+ 4.4	81	14†	30	4	40	5.24	+ 0.27	1.81	0	13	10	12	8	se.	Dr. J. E. McDonald.
Lost Creek	Harrison	1,033	15	53.0	+ 3.4	81	15	21	4	45	3.35	− 0.18	1.02	0	9	14	4	12	sw.	Allen Smith.
Madison	Boone	704	8	57.4[f]	.....	84	12†	29	4†	46[f]	4.12	.....	1.42	0	12	10[f]	12[f]	2[f]	.....	S. E. Bradley.
Mannington	Marion	967	10	54.0	.....	82	15	23	4	46	5.23	+ 0.93	0.98	0.3	20	11	8	11	w.	Jas. A. Morgan.
Marlinton	Pocahontas	2,169	17	52.4	+ 5.2	76	12†	22	4	48	3.17	+ 0.13	0.42	0	12	15	12	3	.....	C. J. McCarty.
Morgantown	Monongalia	1,250	36	55.3[a]	+ 4.3	81	15	27	4	39[a]	3.37	− 0.05	1.00	T.	12	12[a]	8[a]	9[a]	.....	Horace Atwood.
Moundsville	Marshall	640	10	55.9	+ 4.2	84	15	26	4	44	2.96	− 0.23	0.64	T.	13	14	1	15	nw.	M. L. Brown.
New Cumberland	Hancock	987	14	54.0	+ 4.8	83	15	27	4†	50	3.94	+ 0.37	1.50	T.	11	9	8	13	s.	Frank S. Evans.
New Martinsville	Wetzel	634	18	55.8	+ 4.0	84	12†	28	4	44	3.46	− 0.16	0.60	T	9	16	5	9	s.	Wm. Ankron.
Nuttallburg	Fayette	2,252	18	.....	.....	.....	.....	.....	.....	.....	3.05	− 0.23	0.95	0	8	11[b]	9[b]	2[b]	.....	Miss Donna Tully.
Parkersburg	Wood	638	24	56.6	+ 3.7	83	15	31	4	37	4.02	+ 1.11	1.09	T.	12	10	10	10	s.	U. S. Weather Bureau.
Parsons	Tucker	1,662	12	54.1	+ 6.0	83	15	21	4†	50	2.95	− 0.98	0.75	T.	11	8	19	3	.....	J. W. Swisher.
Philippi	Barbour	1,192	18	56.2	+ 5.8	86	15	25	4	47	3.48	− 0.60	0.72	0.4	16	9	13	8	w.	J. D. Dadisman.
Pickens	Randolph	2,785	20	53.0	+ 4.9	84	12	22	8	47	4.24	− 0.75	0.98	1.0	13	14	10	6	w.	Dr. J. L. Cunningham.
Pineville	Wyoming	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. M. Cline.
Point Pleasant	Mason	553	21	58.6	+ 4.0	86	12	29	8	45	3.98	+ 0.70	1.30	0	16	10	5	15	se.	W. D. Holmes.
Powellton	Fayette	904	14	59.8	+ 6.2	86	12†	26	3	43	4.27	+ 0.51	0.99	0	17	8	20	2	.....	Morris Hansford.
Princeton	Mercer	2,469	10	51.7	+ 2.4	78	14	24	4	38	8.00	+ 2.14	2.00	0	13	14	7	9	w.	H. Scott.
Robertsburg	Putnam	574	11	55.6	+ 2.8	83	12	27	4†	47	4.81	+ 0.75	0.95	0	15	14	0	16	s.	E. P. Turley.
Ryan	Roane	639	10	56.2	.....	84	12	23	4	46	4.73	+ 0.66	1.01	0	17	10	11	9	.....	Wm. E. Ryan.
Smithfield	Wetzel	919	8	52.0	.....	80	14	23	4	45	5.24	.....	1.48	T.	14	14	7	9	ne.	G. M. Whisler.
Spencer	Roane	710	13	56.4	.....	87	12	24	4	50	4.61	+ 1.16	1.03	0	13	6	21	3	.....	A. M. McKown.
Sutton	Braxton	839	9	.....	.....	.....	.....	.....	.....	.....	1.99	.....	0.58	0	5	15	0	15	.....	J. E. Baughman.
Terra Alta	Preston	3,207	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. F. Dodge.
Union	Monroe	.....	7	52.9	.....	82	15	22	4	53	4.72	.....	1.70	0	9	.....	.....	.....	.....	Shelton Clark.
Valley Fork	Clay	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	16	5	.....	Miss Blanche Pierson.
Webster Springs	Webster	1,500	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Hamrick.
Wellsburg	Brooke	1,225	12	52.6	+ 4.4	78	15	28	8	33	4.10	+ 0.96	1.07	2.0	14	9	12	9	w.	C. P. Waugh.
Weston	Lewis	824	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss C. M. Davis.
Wheeling	Ohio	645	26	55.5	.....	85	15†	27	4	47	4.23	+ 1.16	0.74	0.4	15	14	5	11	s.	Miss M. B. Forsyth.
Williamson	Mingo	660	11	57.0	+ 1.7	86	12†	30	4†	45	6.84	+ 2.64	2.52	0	13	14	8	8	w.	J. F. Keyser.
Ohio.																				
Amesville	Athens	630	8	55.4	.....	85	12†	24	3†	49	4.35	.....	1.18	0	12	14	6	10	sw.	F. W. Gibson.
Bangorville	Richland	1,380	25	50.3	+ 1.7	79	12	26	3	35	5.03	+ 2.12	1.41	3.0	11	10	7	13	sw.	S. M. Painter.
Bellefontaine	Logan	1,276	33	49.0	+ 0.5	78	12	15	3	36	4.11	+ 0.90	1.51	T.	14	7	17	6	sw.	Cory L. Lane.
Bladensburg	Knox	1,100	21	49.1[e]	+ 0.9	79[e]	12	25[e]	4	43[e]	.....	.....	.....	0.3	10	.....	.....	.....	sw.	Miss Mary Elliott.
Cadiz	Harrison	1,245	9	53.2	.....	82	15	27	4	39	4.78	.....	1.44	1.0	12	8	15	7	sw.	Harry B. McConnell.
Cambridge	Guernsey	803	20	53.1	+ 3.6	82	15	24	4	46	4.11	+ 0.86	0.81	0	10	8	18	4	.....	Samuel Mehaffey.
Camp Dennison	Hamilton	570	19	55.9	+ 3.2	83	12	31	19	43	5.71	+ 2.96	1.26	0	13	9	13	8	s.	Henry F. Pinkvoss.

TABLE 1.—*Climatological data for April, 1912. District No. 3*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Ohio—Continued.																				
Canal Dover	Tuscarawas	884	19	52.4	+ 4.3	80	11	27	9	43	5.28	+ 2.19	1.14	1.0	13	7	15	8	s.	Ed. S. Slingluff.
Canton	Stark	1,089	29	51.0	+ 2.9	79	12†	27	8	41	5.96	+ 2.82	1.24	4.5	15	14	1	15	sw.	Carl H. Meyer.
Cardington	Morrow	1,010	17	.....	.....	.....	.....	.....	.....	.....	4.86	+ 1.81	1.80	3.6	9	.....	.....	.....	sw.	J. W. Shaw.
Chillicothe	Ross	630	9	.....	.....	.....	.....	.....	.....	.....	5.17	.....	1.85	.....	10	.....	.....	.....	.....	Marion Mackey.
Cincinnati	Hamilton	628	41	56.9	+ 2.6	82	15	30	3	33	5.02	+ 2.67	1.58	T.	15	10	8	12	sw.	U. S. Weather Bureau.
Circleville	Pickaway	694	24	54.8	+ 3.0	84	12	29	4	38	4.94	+ 2.21	1.93	T.	14	19	0	11	s.	Dr. H. R. Clarke.
Clarington	Monroe	600	9	53.8	.....	83	16	24	4	43	4.24	.....	0.70	0	15	9	9	12	sw.	Col. S. Tschappat.
Columbus	Franklin	918	34	53.4	+ 2.4	79	15	28	3	31	4.20	+ 1.33	0.98	0.8	15	9	10	11	sw.	U. S. Weather Bureau.
Coshocton	Coshocton	770	3	.....	.....	.....	.....	.....	.....	.....	4.99	.....	0.92	.....	12	.....	.....	.....	.....	Mrs. Ada Jeffries.
Dayton (1)	Montgomery	899	....	53.6	+ 2.0	80	15	23	3	31	4.94	+ 2.04	1.17	3.0	14	11	9	10	sw.	U. S. Weather Bureau.
Dayton (2)	....do.	790	31	54.4	+ 2.7	82	12	23	3	35	5.70	+ 3.02	1.03	.....	14	.....	.....	.....	.....	Mrs. Edith E. L. Boyer.
Delaware	Delaware	896	15	51.7	+ 3.1	78	12†	26	3	35	3.81	+ 0.89	0.85	1.0	12	18	1	11	nw.	De Witt H. Leas.
Demos	Belmont	1,325	24	51.4	+ 1.4	78	12†	26	8	36	4.82	+ 1.56	1.50	0.2	18	14	6	10	sw.	J. T. Dysart.
Dennison	Tuscarawas	846	2	53.8	.....	82	15	27	4	44	5.09	.....	1.63	.....	14	12	12	6	n.	Water Supply Co.
Frankfort	Ross	745	20	56.4	+ 4.7	85	12†	26	4	41	4.16	+ 1.03	1.20	0	9	12	7	11	s.	O. A. Cory.
Gallipolis	Gallia	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.36	.....	1.30	.....	10	.....	.....	.....	s.	Samuel F. Neal.
Garrettsville	Portage	1,005	28	49.0[a]	+ 3.1	78	15	24[b]	3	44	4.74	+ 1.74	.....	4.5	.....	.....	.....	.....	.....	S. M. Luther.
Granville	Licking	960	30	52.2	+ 2.6	80	12	27	4	40	4.42	+ 1.57	0.94	0.2	15	14	1	15	e.	Dr. L. E. Davis.
Gratiot	....do.	1,000	23	53.0	+ 2.9	78	12†	27	4†	36	4.45	+ 1.55	1.00	0.8	13	9	12	9	w.	W. B. Longstreth.
Green	Adams	500	19	56.4	+ 3.4	84	11	29	8	46	4.37	+ 1.23	0.82	0	11	11	3	16	w.	W. F. Kenyon.
Green Hill	Columbiana	1,135	19	49.2	+ 2.7	78	15	24	4	42	3.56	+ 0.60	1.09	1.5	13	9	14	7	sw.	Jos. E. Bentley.
Greenville	Darke	1,060	26	52.5	+ 2.6	81	12	22	3	45	4.18	+ 1.08	0.63	0.3	14	9	9	12	s.	Geo. A. Katzenberger.
Hamilton	Butler	601	....	.....	.....	.....	.....	.....	.....	.....	7.22	.....	1.87	0	15	17	4	9	.....	Earl W. Stout.
Haydenville	Hocking	700	....	55.8	.....	88	15	25	8	51	4.49	.....	1.50	.....	9	19	2	9	sw.	H. W. Stiers.
Hillsboro	Highland	1,063	33	54.8	+ 2.5	80	12†	27	3†	35	3.37	+ 0.12	1.64	T.	11	11	8	11	sw.	Carey H. Roush.
Ironton	Lawrence	575	29	61.0[b]	+ 8.0	89[b]	12	29[b]	4	46[b]	5.84	+ 2.49	2.26	0	14	16	8	6	sw.	James Bull.
Jacksonburg	Butler	975	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. J. B. Owsley.
Kenton	Hardin	1,015	20	49.4	− 0.9	78	12	18	3	40	3.69	+ 0.24	1.00	2.0	8	11	10	9	w.	N. S. Martin.
Killbuck	Holmes	1,067	19	51.5	+ 2.8	79	12	28	4	45	4.99	+ 1.99	1.45	2.0	14	16	4	10	se.	Lloyd C. Schonauer.
Lancaster	Fairfield	898	17	55.0	+ 4.2	77	14†	30	4	34	4.75	+ 1.61	1.44	T.	9	17	3	10	nw.	R. L. Renshaw.
McConnelsville	Morgan	710	28	54.2	+ 3.4	83	15	25	4	41	5.54	+ 2.44	1.35	0.2	15	9	10	11	sw.	C. H. Morris.
Marietta	Washington	627	92	56.8	+ 3.5	84	15	33	2†	41	3.87	+ 0.49	1.04	0	14	13	9	8	s.	Prof. T. D. Biscoe.
Marion	Marion	980	34	53.4	+ 3.8	82	12	24	3	37	4.28	+ 1.35	1.15	6.0	10	10	10	10	se.	Dr. E. H. Raffensperger.
Milfordton	Knox	1,200	20	51.4	+ 4.1	80	12	26	8	42	3.75	+ 0.81	1.74	1.0	9	17	6	7	sw.	L. H. Burgess.
Milligan	Perry	875	19	53.8	+ 3.6	84	15†	24	4	46	4.67	+ 1.63	0.99	T.	11	10	13	7	sw.	V. C. Eveland.
Millport	Columbiana	1,145	19	49.9	+ 1.8	78	15	24	11	46	4.07	+ 0.99	1.40	T.	14	4	16	10	sw.	G. F. Copeland.
Nellie	Coshocton	850	12	52.0	+ 2.6	79	12†	25	4	40	5.17	+ 2.32	1.25	T.	12	12	7	11	sw.	Ethel L. Gammertsfelder.
New Alexandria	Jefferson	1,050	27	51.3	+ 1.2	83	12	26	4†	35	8.10	+ 4.55	2.00	3.0	8	14	5	11	n.	Mrs. Mary K. Pennell.
New Berlin	Stark	1,100	19	49.1	+ 1.4	78	16	23	3†	40	4.89	+ 1.58	1.85	1.0	10	17	3	10	w.	Clayton Holl.
New Waterford	Columbiana	1,053	17	50.3	+ 3.5	79	15	26	4	43	4.66	+ 1.47	1.36	.....	7	10	15	5	sw.	Sam. C. Scott.
Ohio State University	Franklin	757	29	53.6	+ 3.7	79	12	28	3†	38	4.69	+ 1.82	1.03	.....	12	14	5	11	nw.	Prof. H. C. Lord.
Pataskala	Licking	1,015	20	52.7	+ 3.0	80	12	26	4	40	4.98	+ 1.73	1.24	1.5	14	6	17	7	w.	J. N. Ridenour.
Peebles	Adams	645	1	55.4	.....	82	12†	22	4	49	6.80	.....	2.03	T.	14	11	11	8	w.	Ora O. Smalley.
Philo	Muskingum	1,018	17	54.5	+ 3.8	82	15	28	8	36	4.85	+ 1.80	1.62	T.	10	15	7	8	nw.	L. C. Burckholter.
Piqua	Miami	847	2	.....	.....	.....	.....	.....	.....	.....	3.86	.....	0.70	3.2	11	12	7	11	se.	Harry L. Roberts.
Plattsburg	Clark	1,130	19	52.3	+ 2.2	78	12	21	3	31	5.12	+ 2.49	0.98	3.0	11	10	9	11	s.	F. E. Stewart.
Portsmouth	Scioto	527	81	57.6	+ 2.0	84	15	30	4†	38	4.93	+ 1.69	1.63	0	13	11	4	15	sw.	Dr. H. A. Schirrmann.
Prospect	Marion	909	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Neil J. Gast.
Rittman	Wayne	990	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. B. Gish.
Shenandoah	Richland	1,100	20	49.3	+ 2.3	76	15	20	3	34	4.01	+ 0.80	1.18	4.0	12	5	17	8	w.	T. B. Arnett.
Sidney	Shelby	985	29	53.4	+ 3.5	82	15	21	3	38	4.08	+ 1.11	1.28	2.2	12	15	2	13	sw.	Hamline B. Blake.
Somerset	Perry	1,080	13	53.0	+ 2.8	81	12†	27	8	43	4.09	+ 0.58	1.26	0.5	15	14	8	8	s.	Miss M. W. C. Sheridan.
Springfield	Clark	980	18	.....	.....	.....	.....	.....	.....	.....	5.28	+ 2.50	1.20	.....	14	6	15	9	s.	W. A. Webster.
Summerfield	Noble	1,187	6	52.4	.....	82	15	25	4	46	4.99	.....	1.64	0.5	18	5	19	6	sw.	H. R. McClintock.
Syracuse	Meigs	583	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. G. Campbell.
Thurman	Gallia	606	19	58.2	+ 4.4	85	12	27	8	42	3.79	+ 1.38	0.98	0	8	10	5	15	.....	D. D. Thomas.
Urbana	Champaign	1,031	44	52.8	+ 3.5	80	12	18	3	39	5.42	+ 2.30	1.26	5.0	13	8	17	5	sw.	Prof. J. H. Williams.
Warren	Trumbull	900	23	50.2[a]	+ 3.3	78[a]	15	26[a]	4	40[a]	6.53	+ 3.67	2.48	5.2	11	.....	.....	.....	sw.	M. D. McCorkle.
Waverly	Pike	590	29	55.0	+ 1.9	84	12	27	4†	45	4.83	+ 1.60	1.35	T.	17	12	2	16	s.	Dr. Peru Hutt.
Waynesville	Warren	700	27	53.4	+ 3.1	80	15	25	3	30	5.24	+ 2.18	1.85	0.5	12	10	9	11	sw.	Chas. Michener.
Wooster	Wayne	1,030	33	50.0	+ 2.3	78	12	23	19	42	5.58	+ 3.07	1.30	4.0	14	13	6	11	nw.	Experiment Station.
Youngstown	Mahoning	846	19	.....	.....	.....	.....	.....	.....	.....	4.82	+ 2.58	0.94	3.0	13	14	1	15	sw.	G. R. Patton.
Zanesville	Muskingum	700	25	.....	.....	.....	.....	.....	.....	.....	3.76	+ 1.24	0.91	0	10	13	0	17	s.	S. G. Sprague.
Indiana.																				
Anderson	Madison	892	17	53.2	+ 2.4	79	15	25	3	43	4.65	+ 1.42	1.25	1.5	9	13	7	10	s.	W. H. Stanton.
Attica	Fountain	522	2	.....	.....	.....	.....	.....	.....	.....	5.87	.....	1.65	0	12	.....	.....	.....	.....	Robt. E. Ray.
Bloomington	Monroe	744	17	53.8	+ 2.6	80	15	29	8†	41	6.62	+ 3.38	1.53	5.0	16	11	8	11	sw.	Earl E. Ramsey.
Bluffton	Wells	835	17	52.7	+ 2.9	81	12	22	3	37	3.96	+ 0.88	0.96	0	15	12	13	5	sw.	Tom R. Johnston.
Butlerville	Jennings	767	27	56.5	+ 2.9	83	15	28	8	34	6.70	+ 3.17	2.57	1.5	11	13	7	10	sw.	C. F. Hole.
Cambridge City	Wayne	941	21	55.2	+ 5.7	80	12†	22	3	39	5.29	+ 1.91	0.81	0	13	11	6	13	s.	Heze Barnett.
Columbus	Bartholomew	632	29	55.0	+ 2.7	84	12	28	3	40	6.16	+ 3.12	1.36	0	14	11	4	15	sw.	John A. Perry.
Connersville	Fayette	709	30	54.8	+ 3.7	82	12	23	3	42	4.29	+ 0.97	0.80	0.3	9	8	9	13	sw.	H. T. Swindler.
Crawfordsville	Montgomery	780	2	55.2	.....	80	12†	25	3	43	4.74	.....	1.05	2.0	9	10	10	10	sw.	P. H. Burns.
Delphi	Carroll	668	27	51.7	+ 1.9	82	12	26	3	39	4.49	+ 1.21	1.00	T.	16	6	12	12	.....	L. A. Higginbotham.
Eminence	Morgan	782	6	54.4	.....	80	15	27	3	38	5.44	.....	1.20	0	9	16	5	9	sw.	E. E. Kelso, M. D.
Evansville	Vanderburg	386	36	58.2	+ 1.8	81	15	37	3	25	7.02	+ 3.56	1.87	0	15	10	12	8	s.	U. S. Weather Bureau.
Farmersburg	Sullivan	.....	14	55.2[b]	+ 3.2	80	12	30[c]	19	35[c]	3.81	+ 1.02	0.90	1.0	11	5	18	7	sw.	Miss Carrie Yeager.
Farmland	Randolph	1,101	30	51.4	+ 1.2	78	12	20	3	40	4.37	+ 1.07	0.84	5.0	12	9	3	18	se.	W. J. Davisson.
Forest Reserve	Clark	478	.....	.....	.....	.....	.....	.....	.....	.....	5.75	.....	1.69	.....	12	.....	.....	.....	.....	Ambrose Waltman.
Greenfield	Hancock	905	9	54.0	.....	78	15	27	3	32	4.51	.....	1.18	3.0	9	0	19	11	sw.	Frank Larrabee.
Greensburg	Decatur	954	15	53.9	+ 1.4	80	12†	26	3	37	5.00	+ 1.77	1.25	T.	11	16	4	10	w.	C. C. Morrison, M. D.
Huntingburg	Dubois	462	4	54.2	.....	85	15	22	7†	47	8.06	.....	2.05	T.	11	.....	.....	.....	.....	H. Dufendach.
Huntington	Huntington	741	19	51.6	+ 1.7	78	12	24	3	33	4.40	+ 1.51	0.80	T.	13	14	7	9	e.	Chas. McGrew.
Indianapolis	Marion	822	41	53.9	+ 1.5	79	15	29	3	33	4.62	+ 1.15	1.19	1.0	14	9	10	11	s.	Section Center.
Jeffersonville	Clark	455	30	58.2	+ 2.4	84	15	33	8†	35	8.65	+ 4.82	3.19	0	12	8	13	9	sw.	John C. Loomis.
Judyville	Warren	450	5	51.8	.....	80	12	25	3	38	3.74	.....	0.80	T.	14	15	7	8	s.	Dale R. Warrick.
Kokomo	Howard	840	20	51.2	+ 0.2	78	12	24	3	37	4.33	+ 1.13	1.02	T.	11	9	15	6	sw.	P. H. Robertson.
Lafayette	Tippecanoe	617	33	51.5	+ 1.1	77	12	27	3	38	4.22	+ 0.85	0.78	T.	12	17	4	9	sw.	Wm. J. Jones, jr.
Laurel	Franklin	.....	1	52.8	.....	80	12†	25	3†	42	5.79	.....	1.39	1.0	14	10	9	11	sw.	Paul Schultze.
Logansport	Cass	620	32	51.8	+ 1.0	82	12	24	3	45	3.48	+ 0.21	0.96	0	13	11	2	17	e.	Chas. Massena.
Madison	Jefferson	460	20	59.1	+ 4.3	87	15†	29	8	46	6.73	+ 3.50	1.80	T.	13	10	12	8	sw.	Miss F. Cooperider.
Marengo	Crawford	363	30	55.2[b]	− 0.2	83[b]	15	27[b]	8†	44[b]	7.57	+ 2.52	2.88	T.	8	9[b]	7[b]	12[b]	sw.	J. M. Johnson.
Marion	Grant	814	26	52.0	+ 1.3	81	12	25	3	38	4.66	+ 1.35	1.12	3.5	13	10	6	14	s.	James F. Hood.
Mauzy	Rush	980	32	53.3[d]	+ 3.2	80[e]	15	23[d]	3	35[e]	4.75	+ 1.56	0.91	2.5	11	10	9	11	sw.	Elwood Kirkwood.
Monticello	White	674	2	.....	.....	.....	.....	.....	.....	.....	4.42	.....	2.00	T.	10	14	8	8	se.	J. E. Loughry.

TABLE 1.—*Climatological data for March, 1912. District No. 3*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Indiana—Continued.																				
Moores Hill	Dearborn	980	11	55.6	+ 4.9	80	12†	27	3	37	6.77	+ 3.04	2.60	T.	13	13	4	13	sw.	W. S. Bigney.
Mount Vernon	Posey	410	26	58.2	+ 2.3	86	15	34	19	34	5.02	+ 0.50	1.10	0	13	14	2	14	se.	Guy B. Green.
Nashville	Brown	.....	.....	54.5	.....	80	15	26	3†	42	5.51	.....	1.17	T.	11	2	16	12	w.	W. C. Goble.
Paoli	Orange	611	15	54.8	+ 1.5	82	15	27	8†	45	5.99	+ 2.65	1.92	T.	12	13	8	9	sw.	James A. Gillum.
Princeton	Gibson	481	30	56.8	+ 2.4	84	15	30	3	41	6.62	+ 3.31	2.90	0	11	11	4	15	sw.	Albert Mills.
Richmond	Wayne	972	27	52.8	+ 2.7	82	12	20	3	41	5.01	+ 2.08	0.81	0.5	16	6	16	8	.....	Walter Vossler.
Rochester	Fulton	775	7	51.0	.....	73	12	24	3	30	2.21	.....	0.65	0	10	15	3	12	.....	G. P. Keith.
Rockville	Parke	722	26	51.8	− 0.5	72	11	27	3	33	5.27	+ 1.78	1.57	1.0	9	6	11	13	sw.	C. A. Lee.
Rome	Perry	370	9	60.0	.....	86	15	32	19	38	7.58	.....	1.57	0	12	15	8	7	sw.	Adam Anspach.
Salamonia	Jay	.....	7	51.0	.....	79	12	13	3	33	4.51	.....	1.05	7.0	14	13	7	10	sw.	S. A. Armstrong.
Salem	Washington	717	19	56.2	+ 3.2	84	15	27	19	43	6.35	+ 3.03	2.15	0.5	11	7	14	9	sw.	Emmet S. Allen.
Scottsburg	Scott	570	18	58.8	+ 4.2	82	12†	33	8†	35	6.88	+ 3.92	2.51	T.	10	9	10	11	s.	Frank H. Park.
Seymour	Jackson	610	25	57.9	+ 4.0	87	11	28	3	46	7.37	+ 3.94	2.86	T.	10	7	17	6	w.	J. Robt. Blair.
Shelbyville	Shelby	768	8	54.7	.....	80	12	27	3	36	5.55	.....	1.01	2.0	12	11	11	8	sw.	Edgar G. Hodson.
Shoals	Martin	523	5	.....	.....	.....	.....	.....	.....	.....	6.90	.....	1.80	0	11	.....	.....	.....	.....	Rev. G. Halleck Rowe.
Terre Haute	Vigo	498	22	56.2	+ 2.2	79	14†	30	3	33	6.19	+ 2.51	1.50	0	15	15	3	12	sw.	Prof. R. G. Gillum.
Veedersburg	Fountain	612	13	54.6[a]	+ 3.1	80	12	27[a]	3	36[a]	5.03	+ 2.41	1.04	T.	15	13	10	7	s.	L. A. Culver, jr.
Vevay	Switzerland	525	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Frederica Boerner.
Vincennes	Knox	431	20	57.8	+ 3.2	85	15	33	8	36	6.05	+ 2.17	1.15	0	15	12	5	13	s.	Garrett V. List.
Washington	Daviess	484	16	56.8	+ 3.8	83	15	32	3†	32	7.37	+ 3.84	2.62	T.	12	15	6	9	sw.	Charles C. Feagans.
Whitestown	Boone	529	4	51.4	.....	81	12	28	3†	40	4.28	.....	1.08	T.	16	6	21	3	sw.	Clyde O. Laughner.
Winona Lake	Kosciusko	865	5	50.0	.....	78	12	23	3	37	2.66	.....	0.73	T.	9	6	18	6	ne.	Rev. Albert A. Youn.
Worthington	Greene	526	30	56.8	+ 3.0	83	15	28	19	35	4.66	+ 1.14	1.40	0	11	13	10	7	sw.	D. W. Solliday.
Illinois.																				
Albion	Edwards	531	21	57.8	+ 2.7	83	12†	32	19	35	5.79	+ 2.18	2.25	0	11	13	6	11	sw.	B. F. Michels.
Carmi	White	399	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Daniel Berry.
Casey	Clark	645	9	.....	.....	.....	.....	.....	.....	.....	5.48	.....	1.07	2.5	9	11	10	9	.....	William Chenoweth.
Charleston	Coles	720	27	55.4	+ 2.3	79	14	30	8†	33	4.29	+ 0.93	1.05	T.	14	7	11	12	s.	Jacob B. Daisy.
Danville	Vermilion	604	11	54.6	+ 2.7	79	12†	27	3	35	5.42	+ 2.66	1.43	0.3	16	15	2	13	sw.	J. J. Lemon.
Equality	Gallatin	421	14	60.6	+ 4.3	86	15	36	18	30	7.06	+ 2.61	2.58	0	12	17	6	7	s.	Dr. L. W. Gordon.
Fairfield	Wayne	495	19	57.8	+ 2.3	83	12	30	2†	37	5.42	+ 2.07	2.48	0	11	11	13	6	se.	George A. Tromly.
Flora	Clay	495	26	57.6	+ 3.2	82	12	30	3†	35	4.92	+ 1.11	2.35	.....	10	14	9	7	nw.	Joseph S. Peak.
Golconda	Pope	500	34	60.1	+ 2.4	86	15	35	3†	36	7.04	+ 2.92	1.64	0	12	11	6	13	sw.	Dr. Daniel Lawrence.
Hoopeston	Vermilion	715	10	52.4	.....	79	12	27	3	34	5.77	+ 1.64	1.48	T.	14	13	10	7	.....	S. F. Hoskinson.
McLeansboro	Hamilton	462	29	57.8	+ 2.2	85	15	31	8	39	6.45	+ 2.71	2.86	0	12	15	5	10	s.	Prof. W. C. Fairweather.
Metropolis	Massac	346	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Barfield.
Montrose	Effingham	599	1	55.0	.....	79	14	29	3	37	6.61	.....	1.45	.....	12	12	12	6	sw.	J. C. Spitler.
Mount Carmel	Wabash	424	11	57.2	+ 3.1	84	15	33	8†	37	6.70	+ 2.79	2.68	T.	13	15	3	12	s.	Mrs. H. M. Phillips.
New Burnside	Johnson	613	17	57.3	+ 1.0	84	15	31	8	34	5.84	+ 1.43	1.35	0	13	16	2	12	s.	Thomas H. McCabe.
Newton	Jasper	484	1	.....	.....	.....	.....	.....	.....	.....	5.02	.....	1.51	.....	12	16	5	9	.....	J. M. Hicks.
Olney	Richland	486	25	57.8	+ 3.0	84	15	31[a]	3†	34	4.50	+ 0.73	0.99	T.	11	6	11	13	sw.	Victor E. Phillips.
Palestine	Crawford	500	30	57.2	+ 3.2	81[a]	15	32	18	32[a]	4.53	+ 0.89	1.70	T.	15	9	9	12	s.	Duane Shaw.
Paris	Edgar	600	19	54.8	+ 3.5	83	14	28	3	38	5.19	+ 1.59	1.42	T.	12	8	17	5	sw.	H. P. Twyman.
Philo	Champaign	700	28	53.2	+ 2.0	77	12	29	8	36	5.22	+ 1.81	1.08	0	10	14	8	8	sw.	H. A. Burr.
Rantoul	do	768	21	52.0	+ 1.5	77	11†	28	3	37	5.91	+ 2.23	1.20	T.	13	16	3	11	sw.	William Breiner.
Rileyville	Saline	400	15	.....	.....	.....	.....	.....	.....	.....	6.07	+ 2.47	2.90	0	12	14	1	15	s.	W. H. Thornberry.
Shawneetown	Gallatin	307	3	.....	.....	.....	.....	.....	.....	.....	6.94	.....	1.23	0	14	.....	.....	.....	.....	Mrs. Mary O. Spivey.
Tuscola	Douglas	644	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. W. Lester.
Urbana	Champaign	725	10	52.3	+ 2.7	75	12†	29	3	35	5.60	+ 1.56	1.52	T.	11	7	17	6	sw.	Prof. J. G. Mosier.
Kentucky.																				
Alpha	Clinton	.....	18	60.2	+ 3.2	83	12	34	4	38	13.66	+ 9.39	3.90	0	9	12	2	16	s.	W. W. Hicks.
Anchorage	Jefferson	700	11	56.1	+ 3.4	83	15	28	8†	37	9.63	+ 5.69	3.50	0	....	13	3	14	sw.	C. E. Barrett.
Bardstown	Nelson	637	15	59.6	+ 5.2	85	12	32	19	42	9.21	+ 5.33	1.84	0	13	11	6	13	se.	T. S. Talbott.
Beattyville	Lee	650	8	54.2	.....	82	28	25	4†	52	6.88	+ 1.86	1.68	0	12	12	6	12	w.	G. W. Cann.
Beaver Dam	Ohio	441	9	59.2	+ 4.4	87	13	32	19	46	7.36	+ 2.74	1.90	0	11	12	5	13	s.	W. T. Austin.
Berea	Madison	1,070	11	61.4	+ 6.9	83	12	31	4†	40	5.59	+ 2.00	1.36	0	9	14	9	7	sw.	C. F. Rumold.
Blandville	Ballard	445	31	60.0	+ 2.8	81	15	39	8†	26	7.81	+ 3.62	1.72	0	13	7	11	12	sw.	E. W. Horr.
Bowling Green	Warren	500	23	60.2	+ 2.3	85	12	31	9	47	11.49	+ 7.72	4.54	0	10	10[a]	2[a]	17[a]	s.	Mrs. L. G. Causey.
Burnside	Pulaski	773	21	.....	.....	.....	.....	.....	.....	.....	9.07	+ 5.12	3.46	0	13	12	0	18	.....	G. M. Estes.
Calhoun	McLean	397	9	60.6	.....	83	15	35	19	28	7.70	.....	1.55	0	12	6	16	8	sw.	W. A. Taylor.
Catlettsburg	Boyd	544	23	.....	.....	.....	.....	.....	.....	.....	5.18	+ 1.72	1.70	0	17	15	4	11	.....	Mrs. Mertie M. Bruns.
Earlington	Hopkins	370	22	60.3	+ 3.1	83	12	31	19	40	6.69	+ 2.37	1.90	0	13	10	7	13	nw.	Brick Southworth.
Edmonton	Metcalf	600	21	59.8	+ 4.0	82	12	31	19	42	7.89	+ 3.79	2.16	0	12	7	13	10	s.	Miss Lee Ray.
Eubank	Pulaski	1,177	18	56.0	+ 2.1	82	12	28	8	41	7.07	+ 3.26	2.70	0	12	10	0	20	s.	Mrs. Katie Payne.
Falmouth	Pendleton	530	23	.....	.....	.....	.....	.....	.....	.....	7.06	+ 3.83	1.60	0	13	13	3	14	se.	J. V. Oldham.
Farmers	Rowan	668	6	56.6	.....	85	13	25	4	47	5.28	.....	2.50	0	6	17	2	11	w.	Miss Gertrude Sorrell.
Frankfort	Franklin	560	21	57.7	+ 2.6	83	15	34	6	42	8.17	+ 5.00	2.31	0	13	14	2	14	s.	J. H. Roberts.
Franklin	Simpson	691	18	60.8	+ 1.7	81	11†	32	19	38	7.25	+ 2.64	2.15	0	10	2	24	4	s.	J. E. Newman.
Greensburg	Green	581	20	56.4	+ 1.4	86	12	29	19	45	6.11	+ 2.45	2.55	0	10	10	0	20	e.	L. C. Alcorn.
High Bridge	Jessamine	762	9	.....	.....	.....	.....	.....	.....	.....	6.68	+ 2.43	1.51	0	11	16	0	14	.....	Miss Lulu Wood.
Hopkinsville	Christian	524	16	60.1	+ 3.7	84	12†	33	8	42	13.19	+ 8.94	6.30	0	13	13	1	16	se.	W. F. Randle.
Irvington	Breckenridge	.....	14	58.6	+ 3.5	82	15	35	3†	34	8.50	+ 4.19	2.00	0	11	12	6	12	sw.	W. J. Piggott.
Leitchfield	Grayson	635	16	58.4	+ 3.4	80	12†	31	19	37	7.93	+ 3.61	1.85	0	....	11	12	7	s.	John E. Stone.
Lexington	Fayette	989	24	56.6	+ 2.9	80	12	33	8	33	6.89	+ 3.55	2.41	0	14	9	7	14	s.	U. S. Weather Bureau.
Loretto	Marion	681	15	60.4	+ 6.3	81	12	28	19	39	6.24	+ 3.22	1.80	0	11	14[a]	6[a]	9[a]	.....	Loretto Academy.
Louisville	Jefferson	525	40	59.2	+ 3.0	85	15	36	3	37	8.60	+ 4.53	2.95	0	16	6	11	13	sw.	U. S. Weather Bureau.
Marion	Crittenden	.....	17	59.3	+ 2.4	82	15	36	8	29	10.81	+ 6.91	1.73	0	12	9	8	13	sw.	B. C. Paris.
Maysville	Mason	524	15	55.4	+ 2.1	86	12	28	8	49	6.12	+ 2.62	2.07	0	14	17	4	9	se.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1,128	17	60.2	+ 4.4	83	12	28	4	45	11.28	+ 6.97	2.85	0	10	15	14	1	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	22	56.6	+ 3.2	82	12	30	8	41	7.27	+ 3.62	2.30	0	14	10	7	13	s.	James O'Connell.
Owensboro	Daviess	479	15	59.3	+ 4.6	82	15	35	19	33	7.44	+ 3.11	1.70	0	13	9	4	17	s.	Henry S. Berry.
Paducah	McCracken	341	23	.....	.....	.....	.....	.....	.....	.....	8.92	+ 4.87	2.00	0	11	13	0	17	s.	S. A. Fowler.
Paintsville	Johnson	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John C. Ramey.
Pikeville	Pike	.....	4	.....	.....	.....	.....	.....	.....	.....	6.39	.....	2.76	0	11	14	0	16	.....	I. M. Williams.
Richmond	Madison	926	20	59.0	+ 3.8	84	12	32	8	35	6.47	+ 3.24	1.43	0	13	13	4	13	.....	J. W. Crooke.
St. John	Hardin	777	16	57.7	+ 3.1	81	12	31	19	40	8.40	+ 4.41	1.75	0	12	15	0	15	.....	Bethlehem Academy.
Scott	Kenton	.....	14	56.5	+ 3.8	83	12	27	3	37	5.54	+ 2.31	1.56	0.5	14	10	11	9	s.	E. B. Wilson.
Shelby City	Boyle	1,087	18	57.8	+ 3.5	85	12	27	8	48	5.23	+ 1.98	1.11	0	11	16	5	9	s.	H. F. Ewing.
Shelbyville	Shelby	759	23	57.8	+ 2.9	82	12†	32	8†	40	8.73	+ 5.70	1.90	0	11	13	4	13	sw.	C. R. Burnett.
Taylorsville	Spencer	489	10	57.8	+ 3.6	81	12†	30	4†	42	8.31	+ 3.08	2.73	0	10	10	9	11	s.	E. D. Bourne.
Williamsburg	Whitley	939	16	58.7	+ 3.3	85	12	31	8†	46	9.14	+ 5.41	2.90	0	12	12	1	17	e.	Noble C. Jones.
Williamstown	Grant	943	10	54.8	+ 3.2	83	12	28	3	38	6.57	+ 3.13	1.58	T.	13	14	4	12	.....	Miss Rose Carter.

TABLE 1.—*Climatological data for April, 1912. District No. 3*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Tennessee.																				
Ashwood	Maury	725	33	61.8	+ 3.5	80	12†	34	3	36	10.18	+ 5.43	2.10	0	13	5	7	18	s.	Mrs. Joseph W. Fleming.
Benton	Polk	880	27	60.8	+ 1.4	83	12	28	8	41	6.35	+ 2.21	1.80	0	11	6	14	10	s.	George L. Williams.
Bird's Bridge	Greene		6								7.72		1.36	0	16	12	3	15	e.	David B. George.
Bluff City	Sullivan		15								6.14	+ 3.01	1.91	0	15	10	0	20	e.	John W. Fisher.
Byrdstown	Pickett	1,026	19	61.7	+ 5.3	83	12	34	19	36	8.38	+ 3.84	1.89	0	10	3	10	17	s.	John Lacy.
Carthage	Smith	500	28	61.8	+ 3.2	83	11†	32	3	37	10.00	+ 5.81	3.10	0	14	12	1	17	se.	Earl C. Pickering.
Cedar Hill	Robertson	625	12	61.7	+ 4.1	88	14	33	19	40	10.42	+ 5.77	2.50	0	16	11	12	7	s.	J. Frank Ruffin.
Celina	Clay	494	9								11.01		3.42	0	11	12	1	17	se.	Charles M. Anderson.
Center Point	Chester	400	15																	Halbert H. Bailey.
Charleston	Bradley	709	15								8.29	+ 3.80	1.60	0	14	10	2	18	s.	John T. Weeks.
Chattanooga	Hamilton	808	33	61.0	+ 1.0	80	12	39	19	33	9.55	+ 5.16	2.23	0	15	6	9	15	s.	U. S. Weather Bureau.
Clarksville	Montgomery	500	49	61.5	+ 3.8	82	14	35	19	37	10.22	+ 5.53	3.06	0	14	8	13	9	s.	Prof. James A. Lyon.
Clinton	Anderson	800	24								9.34	+ 5.09	2.05	0	16	12	0	18	s.	Hugh Evans.
Crossville	Cumberland	1,895	....	58.0	.....	78	27	32	3†	36	11.18	.....	2.27	0	13	14	10	6	.....	J. E. Converse.
Dandridge	Jefferson		8								6.61		2.10	0	12	13	2	15	w.	James E. Swann.
Decatur	Meigs	850	16	60.6	+ 2.8	83	12	31	9	43	8.74	+ 3.71	2.00	0	16	11	13	6	sw.	J. Worth Lillard.
Dickson	Dickson	800	16	61.0	+ 3.2	82	14†	31	18	40	10.17	+ 5.26	3.00	0	8	9	10	11	s.	Nathan R. Sugg.
Dover	Stewart	500	17	61.2	+ 2.8	83	12†	32	19	38	11.02	+ 7.18	1.81	0	12	6	9	15	s.	Asa M. Tippit.
Dunlap	Sequatchee	726	3	61.6	.....	81	12†	33	4†	43	8.48	.....	2.00	0	16	7	13	10	.....	S. Bradford Boyd.
Elizabethton	Carter	1,575	22								6.05	+ 2.67	1.57	0	13	11	0	19	e.	Charles Boyd.
Erasmus	Cumberland	1,850	15	56.9	+ 4.3	79	12†	27	9	46	12.24	+ 6.77	4.50	0	13	6	14	10	se.	Mrs. Sara E. Ashley.
Florence	Rutherford	560	30	60.6	+ 1.7	80	12	35	19	34	9.81	+ 5.67	2.16	0	12	9	11	10	s.	Erastus P. Bell.
Franklin	Williamson	648	22	61.0	+ 3.1	81	12	35	19	35	9.98	+ 4.97	2.33	0	12	10	8	12	.....	Young M. Rizer.
Hall's Hill	Rutherford		10								10.05		2.80	0	11	11	2	17	s.	Edward F. Wright.
Harriman	Roane	841	17																	
Hohenwald	Lewis	983	26	61.2	+ 3.0	82	28	31	3	38	10.57	+ 5.88	2.70	0	13	7	17	6	s.	Mrs. Mary Lutzelman.
Iron City	Lawrence	600	15	60.8	+ 2.1	84	28	31	3†	44	9.82	+ 4.90	3.45	0	14	2	25	3	sw.	Capt. H. Paul Seavy.
Jefferson City	Jefferson		2								8.35		1.43	0	14					Calvin C. Maddox.
Johnson City	Washington	1,020	1	58.4	+ 3.5	83	12	29	4	40	6.82	+ 3.13	1.70	0	13	11	11	8	w.	Ward Crosby.
Johnsonville	Humphreys	364	16	62.2	+ 3.6	84	14	32	19	41	8.07	+ 3.47	1.83	0	14	6	13	11	s.	Miss Sallie B. Mathews.
Kingston	Roane		21								9.30	+ 5.12	2.68	0	15	10	0	20	s.	Henry Crumbliss.
Knoxville	Knox	977	41	59.6	+ 2.2	82	12	35	4	34	7.98	+ 3.34	2.33	0	13	6	13	11	sw.	U. S. Weather Bureau.
Lebanon	Wilson	522	3	61.2	.....	82	12	33	19	37	11.40	.....	2.34	0	13	9	4	17	s.	H. Logan Fields.
Lewisburg	Marshall	727	17	61.4	+ 3.4	82	28	33	19	40	12.60	+ 8.51	3.36	0	14	6	11	13	s.	Dr. Robert D. Crutcher.
Loudon	Loudon	816	9								8.50	+ 4.33	2.12	0	14	10	7	13	w.	Robert W. Clark.
Lynnville	Giles	770	24	59.0	+ 0.9	79	11†	36	19	32	11.84	+ 7.11	3.82	0	12	9	16	5	s.	Col. James H. Burrow.
McGhee	Monroe		8								8.62		1.80	0	14	15	0	15	s.	Miss Alice L. Headrick.
McMinnville	Warren	1,011	28																	
Maryville	Blount	1,050	16																	Mrs. Sam T. Broyles.
Mountain City	Johnson	2,486	15	55.4	+ 5.2	82	15	22	4	46	5.16	+ 1.51	0.94	0	9	18	8	4	.....	Edward E. Barry.
Nashville	Davidson	654	41	60.1	+ 1.0	80	12	35	19	32	11.73	+ 7.37	3.88	0	14	4	13	13	s.	U. S. Weather Bureau.
Newport	Cocke	1,280	22	58.8	+ 2.1	80	12†	32	4†	36	7.17	+ 3.58	1.58	0	14	9	5	16	s.	Dr. Charles T. Burnett.
New River	Scott	1,215	5								8.96		3.20	0	8	9	0	21	sw.	Burl W. Buttram.
Palmetto	Bedford	770	19	61.2	+ 2.3	80	11†	34	8†	34	12.51	+ 8.14	3.92	0	12	11	11	8	s.	Mrs. Ross Woods.
Perryville	Decatur	387	15	63.5	.....	84	28	35	19	40	14.80	+10.87	4.30	0	13	9	7	14	.....	Oliver C. Kirksey.
Pinewood	Hickman		5	61.2	.....	86	11	30	3†	47	11.17	.....	3.15	0	8	2	17	6	s.	Miss Carrie Cash.
Rogersville	Hawkins	1,150	27	59.6	+ 3.7	83	12	29	4	41	8.03	+ 4.47	2.80	0	15	11	11	8	w.	Fred Beal.
Rugby	Morgan	1,410	24	58.2	+ 3.8	82	12†	26	4	48	9.12	+ 4.58	2.47	0	11	9	7	14	nw.	Samuel G. Wilson.
Savannah	Hardin	442	28	62.8	+ 2.4	81	21	39	9	....	9.37	+ 5.11	2.30	0	14	11	4	15	s.	W. H. Carrington.
Sevierville	Sevier		6	60.4	.....	84	12	31	4†	41	8.20	.....	1.86	0	15	2	10	18	sw.	Herbert O. Eckel.
Sewanee	Franklin	2,000	16	57.5	+ 1.9	76	12	33	3†	35	6.36	+ 2.21	2.11	0	10	12	5	13	s.	University of the South.
Sparta	White	920	6	59.6	.....	83	12†	33	9	41	10.11	.....	1.96	0	10	6	6	18	w.	Ernest H. Hull.
Springville	Henry	377	9	60.3	+ 2.3	83	14	32	19	40	11.74	+ 6.37	4.24	0	13	13	9	8	se.	Hudnall A. Boden.
Tazewell	Claiborne		15	55.9	.....	81	12	25	4	44	10.44	+ 6.49	2.84	0	15	6	7	17	sw.	J. Calloway Carr.
Tullahoma	Coffee	1,075	24	60.8	+ 3.5	82	28	32	19	41	7.62	+ 2.97	1.95	0	12	5	14	11	s.	Reuben T. Moore.
Walling	White	909	9								10.09		3.65	0	12	11	6	13	s.	John K. Roberts.
Waynesboro	Wayne	753	26	60.8	+ 2.2	82	28	32	3†	41	13.07	+ 8.84	4.00	0	15	5	14	11	s.	Harry C. Boyd.
Wildersville	Henderson	400	15	61.3	+ 2.8	82	15	34	4	40	10.52	+ 6.39	2.50	0	11	10	6	14	s.	William R. Wilson.
Worsham	Sumner	550	11								9.65	+ 5.08	4.05	0	9	11	4	15	w.	James G. Elizer.
Yukon	Lincoln	850	15	60.2	+ 1.3	80	12†	34	3†	31	.....	.....	.....	0	....	6	18	6	sw.	William P. Watson.
Alabama.																				
Bridgeport	Jackson	660	12	.....	.....	.....	.....	.....	.....	.....	8.50	+ 4.35	2.12	0	14	.....	.....	.....	e.	R. L. Moore.
Decatur	Morgan	573	30	62.0	+ 0.3	83	28	38	9†	36	9.67	+ 5.43	1.82	0	18	9	2	19	e.	Ernest A. Carriger.
Florence	Lauderdale	563	28	61.4	+ 0.4	84	27	35	8†	41	7.98	+ 3.53	1.18	0	13	11	2	17	e.	Robt. E. Coburn.
Guntersville	Marshall	580	2	63.0[a]	.....	87	11	37	19	36	7.15	.....	1.65	0	17	9	3	18	e.	L. S. Long.
Madison	Madison	573	18								9.03	+ 4.92	2.00	0	11	11	7	12	se.	R. A. Patton.
Riverton	Colbert	360	15	59.8	+ 1.2	85	28	31	8	43	8.71	+ 4.45	2.80	0	15	7	4	19	s.	Ernie J. Moore.
Scottsboro	Jackson	652	29	62.2[a]	+ 2.1	81	12†	35	9†	38	6.72	+ 2.18	1.75	0	14	8	5	17	.....	H. A. Caldwell.
Tuscumbia	Colbert	488	30	61.0	0.0	82	28	38	3†	35	8.19	+ 3.71	1.69	0	14	7	2	21	se.	Samuel Moore.
Georgia.																				
Diamond	Gilmer	2,020	20	60.6[a]	+ 3.7	82	11	33	10	43	10.72	+ 5.48	2.80	0	11	11	8	11	.....	R. A. Kimzey.
Mineral Bluff	Fannin	1,571	....	58.2	.....	81	12	28	4	44	5.54	.....	1.60	0	13	6	19	5	nw.	J. M. Clement.
North Carolina.																				
Altapass	Mitchell	2,629	....	53.0	.....	70	2	32	7†	28	3.06	.....	3.00	0	2	20	7	3	ne.	Altapass Inn.
Andrews	Cherokee	1,800	2	59.3	.....	80	11†	29	4	43	6.60	.....	1.79	0	13	10	13	7	sw.	J. D. Link.
Asheville	Buncombe	2,255	33	55.9	+ 2.0	76	12	30	9	39	4.17	+ 0.13	1.02	0	11	11	6	13	se.	U. S. Weather Bureau.
Banners Elk	Avery	3,750	4	50.2	.....	75	15†	20	4	42	5.18	.....	1.20	0	9	14	5	11	w.	T. L. Lowe.
Blantyre	Transylvania	1,950	....	56.9	.....	79	29	32	5	37	3.80	.....	1.60	0	8	11	12	7	w.	R. W. Collett.
Blowing Rock	Watauga	4,090	3	49.6[a]	.....	68	13	23	9	39	3.52	.....	1.32	0	7	15	2	13	s.	Herman S. Deal.
Brevard	Transylvania	2,230	11	55.8	+ 1.5	79	19	25	8	45	5.75	+ 1.06	1.65	0	10	14	16	0	n.	W. E. Breese.
Bryson City	Swain	2,000	24								7.10	+ 2.85	1.52	0	15				.....	D. K. Collins.
Cullowhee	Jackson	2,100	2	57.9	.....	79	12†	26	4	44	5.21	.....	1.28	0	12	12	4	14	s.	Frank H. Brown.
Eagle Nest	Haywood	5,050	....	53.4	.....	72	13	26	4	38	5.89	.....	1.45	0	13				.....	S. C. Satterthwait.
Hendersonville	Henderson	2,167	16	57.4	+ 4.1	78	18	28	9	41	4.54	+ 0.36	1.55	0	8	16	6	8	s.	Dr. L. B. Morse.
Highlands	Macon	3,670	22	51.0	+ 1.5	73	25	26	4	38	7.59	+ 1.09	1.40	0	14	9	8	13	se.	T. G. Harbison.
Hot Springs	Madison	1,326	14	60.4	+ 4.2	85	12	29	4	38	7.05	.....	1.60	0	13	11	7	12	w.	P. A. Garner.
Jefferson	Ashe	2,800	5	54.0	.....	78	12	24	9	44	4.87	.....	1.94	0	8	7	4	19	w.	Prof. E. J. Johnson.

TABLE 1.—*Climatological data for April, 1912. District No. 3*—Continued

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
North Carolina—Con.																				
Marshall	Madison	1,646	10	58.2	+ 4.3	81	12	28	4	44	5.71	+ 1.88	1.31	0	11	13	4	13	w.	M. L. Church.
Murphy	Cherokee	1,614	36	.....	.....	.....	.....	.....	.....	.....	7.08	+ 2.08	1.75	0	12	.....	.....	.....	.....	James C. Midyett.
Rock House	Macon	3,100	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Barry C. Hawkins.
Transon	Ashe	2,600	....	53.2	.....	73	12	22	4	42	3.07	.....	0.72	0	9	17	10	3	nw.	S. M. Transon.
Waynesville	Haywood	2,756	18	56.6	+ 4.4	78	12†	26	4	41	5.80	+1.95	1.40	0	16	15	1	14	sw.	Judge J. C. L. Gudger.
Virginia.																				
Big Stone Gap	Wise	1,540	21	57.1	+ 3.3	81	12	28	4	40	10.47	+ 6.55	2.10	0	9	12	2	16	w.	John W. Fox, sr.
Blacksburg	Mongtomery	2,170	21	54.1	+ 3.9	80	15	29	4	41	3.41	+ 0.48	0.72	0	12	8	9	13	w.	Agricultural Exp. Station.
Burkes Garden	Tazewell	3,250	17	50.2	+ 2.8	75	15	21	4†	41	5.49	+ 1.61	1.50	0	11	12	4	14	w.	C. H. Greever.
Elk Knob	Lee	3,243	9	57.2	.....	78	12	29	3	33	9.16	.....	3.04	0	13	9	8	13	sw.	Henry Nicoll.
Ivanhoe	Wythe	2,028	8	53.7	.....	74	15	30	4	32	3.20	.....	0.66	0	14	12	14	4	w.	Miss Alice G. Jewett.
Lebanon	Russell	2,131	2	56.4	.....	81	15	24	4	41	6.03	.....	2.22	0	9	12	5	13	sw.	R. D. Swain.
Max Meadows	Wythe	2,028	16	54.6	+ 3.3	80	15	24	3	45	4.66	+ 1.38	0.90	0	10	15	10	5	sw.	James M. Graham.
Mendota	Washington	1,350	3	.....	.....	.....	.....	.....	.....	.....	7.65	.....	2.15	.....	14	.....	.....	.....	.....	Frank M. Barker.
Mountain Lake	Giles	4,348	2	55.3	.....	74	15	32	3†	35	5.41	.....	1.30	0	9	13	5	12	se.	H. E. Dorland.
Radford	Montgomery	1,773	3	.....	.....	.....	.....	.....	.....	.....	4.16	.....	1.06	0	8	.....	.....	.....	.....	Arthur Roberts.
Speers Ferry	Scott	1,221	16	.....	.....	.....	.....	.....	.....	.....	8.32	+ 4.59	2.54	0	14	.....	.....	.....	.....	Mrs. L. E. Venable.
Wytheville	Wythe	2,298	19	53.4	+ 1.4	78	12	28	4	37	3.61	− 0.05	1.14	T.	12	15	12	3	w.	U. S. Weather Bureau.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 3, Ohio Valley.*

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
New York.																																
Allegany	Allegheny	.55	.55	...	...	...	...	.40	.05	...	...	T.	.33	...	.02	.39	...	T.	...	T.	...	...	.58	.10	...	...	T.	...	*	1.55	...	4.52
Bolivar	do	.48	1.32	...	...	...	...	.50	.06	...	...	T.	.32	...	T.	.27	...	...	...	...	...	...	.46	...	...	...	...	...	...	1.34	...	4.75
Olean ‖	do	.43	.58	.82	.03	...	...	.15	.40	T.	...	...	...	.23	...	.32	T.	...	.14	T.	T.	...	.20	.24	.04	.07	...	...	...	.85	.58	5.08
Pennsylvania.																																
Aleppo	Ohio	...	.40	.07	...	...	...	.25	...	...	...	.15	.20	.10	.05	...	...	.65	.38	...	...	...	...	T.	...	.08	.45	...	.30	.20	3.31
Baldwin	Allegheny	T.	...	.10	...	...	...	.31	T.	...	.05	...	...	.10	.24	...	.10	...	T.	...	...	...	.17	.13	.15	...	T.	.13	...	1.50	.39	3.37
Beaver Dam ‖	Ohio	...	.53	.63	...	...	...	.06	.26	T.	.04	...	...	.29	.04	.58	...	T.	.23	.01	...	...	...	.06	...	.03	T.	.09	...	.93	.67	4.45
Beaver Falls ‖	do	...	.45	.68	...	...	...	.07	.34	T.	.07	...	...	.47	.05	.54	...	T.	.16	T.	...	...	...	.08	...	.07	T.	.09	...	.85	.93	4.83
Brookville	Allegheny	...	...	...	...	...	...	.10	...	...	...	...	...	.13	.05	...	...	...	...	...	...	...	.37	...	.21	...	...	.05	...	1.60	...	2.51
California	Monongahela	T.	.40	.02	...	...	...	.15	T.	...	.02	...	2.15	.08	T.	...	.18	.40	.79	T.	...	...	.15	.02	.05	...	.12	.35	...	.30	.14	3.38
Clarion ‖	Allegheny	.41	.42	.71	...	...	...	.12	.50	...	...	...	...	.15	...	...	.35	...	.05	...	...	...	...	.10	...	...	...	...	...	.96	.77	4.62
Claysville	Ohio	...	T.	.88	.11	...	...	...	.35	T.	...	...	...	.39	.25	T.	...	.68	.27	.02	...	...	.03	T.	T.	.28	.30	.38	...	.85	.13	4.90
Confluence ‖	Youghiogheny	...	.10	.15	T.	...	...	T.	.19	...	T.	T.	...	.04	T.	.20	.04	.08	.42	T.	T.	...	...	.22	...	.20	...	.63	.19	T.	.65	3.11
Coraopolis ‖	Ohio	...	.48	.35	...	...	...	.06	.30	T.	.06	...	...	.27	.08	.19	...	T.	.39	.02	...	...	...	.06	...	.10	.01	.23	...	.48	.98	4.06
Davis Island Dam ‖	do	...	.46	.32	...	...	...	.04	.22	T.	T.	...	...	.40	.08	.11	...	T.	.40	.04	...	...	...	.09	...	.04	T.	.29	...	.50	1.05	4.04
Derry Station	Allegheny	T.	.61	T.	...	...	...	.41	...	...	...	...	...	.22	.05	.14	.02	.60	.82	...	...	...	.06	...	.29	...	.12	.25	...	.41	.56	4.56
Ellwood City ‖	Ohio	...	.37	.74	T.	...	...	.09	.43	T.	.03	...	...	.24	.09	.61	...	...	.19	.02	...	...	...	.06	...	.13	T.	.09	...	.93	.76	4.78
Franklin ‖	do	.36	.61	.58	...	...	...	.18	.59	...	.05	...	.11	.22	.03	.53	.11	...	.32	.05	...	...	.04	.44	...	.06	...	.02	...	.92	.67	5.89
Freeport ‖	do	...	.65	.53	...	...	...	.07	.23	...	.11	...	...	.30	.12	.07	...	...	.31	...	...	...	...	...	...	.14	...	.17	...	.68	.70	4.09
Greensboro ‖	Monongahela	...	.10	.40	...	...	...	T.	.12	...	T.	.02	...	.26	.06	.30	.04	.10	.60	.02	...	...	...	.12	...	.10	...	.56	.10	.12	1.00	4.02
Greensburg	Youghiogheny	T.	.73	.05	...	...	...	.30	T.	...	.01	...	...	.31	.05	.03	.06	.55	.50	...	...	...	.05	.05	.12	...	.22	.29	...	.48	.73	4.53
Greenville	Ohio	.22	.98	.04	...	...	...	.60	.05	...	...	...	.16	...	.24	1.31	...	.10	.05	T.	...	...	T.	.19	T.	...	T.	T.	...	1.41	.25	5.60
Grove City	do	.04	.99	.12	...	...	...	.65	.04	...	.04	...	...	.05	.44	.29	...	.08	.13	.01	...	...	.07	.12	.06	...	.01	.02	...	1.47	.13	4.76
Herrs Island Dam ‖	Allegheny	...	.53	.37	.01	...	...	.04	.24	T.	T.	...	...	.50	.05	.07	...	T.	.54	T.	...	...	...	.29	...	.13	T.	.31	...	.42	.90	4.40
Indiana	do	...	.73	.05	...	...	...	.55	...	...	...	...	.15	.39	.05	.18	...	.23	.52	...	...	...	...	.33	.16	...	.09	.14	...	.72	.66	4.95
Irwin	Monongahela	...	.85	...	...	...	...	.31	.01	...	...	...	...	.21	.07	...	...	.33	.28	...	...	...	.19	.01	.13	...	.13	...	...	.97	.43	3.92
Johnstown	Allegheny	.20	.30	.04	...	...	...	.30	.04	...	.01	...	.03	.22	.34	...	.05	.35	.76	T.	...	...	.24	.18	.32	...	.50	.12	...	.30	.70	5.00
Lock No. 4 ‖	Monongahela	...	.35	.20	...	...	...	.03	.25	T.	T.	...	...	.30	.05	.13	.05	.11	1.10	.20	...	...	...	.05	...	.22	T.	.45	...	.65	.70	4.66
Lycippus	Allegheny	T.	.66	.02	...	...	...	.42	...	T.	T.	...	...	.33	.11	...	T.	.52	.63	.04	...	...	.08	.05	.07	...	.20	.32	...	.47	.30	4.22
Parkers Landing ‖	do	...	.64	.64	...	...	...	.12	.62	...	.06	...	T.	.08	.04	.36	.14	...	.10	...	...	...	...	.14	...	.12	...	.06	...	.96	.72	4.80
Pittsburgh	Ohio	.12	.85	.02	...	...	...	.27	T.	...	T.	...	.45	.06	.08	...	...	.52	T.	.01	...	...	.24	.01	.17	...	.28	T.	.02	1.07	.15	4.32
Saegerstown	Allegheny	.46	.92	.12	...	...	...	.69	...	...	...	...	.04	.13	.33	.70	.03	...	.20	.06	...	...	.55	.05	.02	...	...	...	...	.30	.06	5.66
Saltsburg ‖	do	...	.34	.35	T.	...	...	.08	.19	...	.02	...	...	.32	.03	.04	...	...	.68	.02	...	...	T.	.06	...	.04	...	.38	T.	.30	.72	3.59
Sharon ‖	Ohio	.08	.51	.50	T.	...	...	.20	.30	...	.05	...	T.	.12	...	1.19	...	...	.26	...	...	...	...	.19	...	T.	T.	T.	...	.93	.75	5.14
Skidmore	do	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Somerset	Youghiogheny	.22	...	...	...	...	...	.20	...	...	...	...	...	.59	.16	...	...	.21	.52	.03	...	...	.46	...	.48	...	.52	.35	...	.30	.85	4.95
Springdale ‖	Allegheny	...	.70	.30	.02	...	...	.06	.26	...	.04	...	.24	.66	.06	.09	...	...	.43	...	...	...	...	.15	...	.07	...	.29	...	.40	.87	3.64
Uniontown	Monongahela	...	.18	.34	...	...	...	.18	.06	...	.05	...	...	.47	.05	.23	...	.07	.61	...	...	...	.07	.10	...	.18	.07	.54	...	.30	1.26	4.75
Warren	Allegheny	.75	.70	.10	...	...	...	.62	.10	.10	...	...	.20	.24	.20	.70	...	.10	.10	.10	...	...	.50	.20	...	.10	...	...	...	1.10	...	5.91
West Newton ‖	Youghiogheny	...	.44	.26	...	...	...	.10	.20	...	.01	T.	...	.31	.07	.06	.09	.04	1.16	.02	...	...	...	.01	...	.10	...	.47	...	.10	.99	4.43
Maryland.																																
Deer Park	Youghiogheny	.43	.78	.12	...	...	...	.26	.05	...	...	...	...	.17	...	...	.15	.05	.60	.04	...	...	.14	...	.14	...	.13	.75	...	.15	.42	4.38
Grantsville	do	.05	.45	...	...	...	...	...	...	...	...	...	...	.53	.18	.22	.10	...	.62	...	...	...	.38	...	.33	.25	.10	.88	T.	.10	.54	4.73
Oakland	do	.02	.47	.10	...	...	...	.25	.05	...	.01	...	...	.06	.02	...	.14	.04	.84	.03	...	...	.15	.04	.11	.05	.03	.69	...	.11	.45	3.66
West Virginia.																																
Bancroft ‖	Great Kanawha	...	.75	.34	...	...	...	.24	...	...	...	...	...	.32	.23	...	.16	.25	.87	...	...	...	.20	.03	...	.09	.03	.86	.03	.22	.30	4.92
Beckley	do	1.82	...	...	...	...	...	...	...	...	...	...	...	...	.98	.70	...	...	.67	...	...	...	...	.35	...	...	1.30	...	...	...	...	5.82
Bens Run	Ohio	...	.40	...	...	...	...	.46	...	...	.02	...	...	.16	.09	...	...	.60	.10	...	...	...	...	.12	.10	...	.80	.49	.03	.50	.41	4.28
Bluefield	Great Kanawha	.30	1.62	.20	...	...	...	.20	...	...	...	...	...	...	T.	.01	.01	.10	.35	...	...	...	.55	.22	...	...	.25	1.00	...	.52	.26	5.59
Brandonville ‖	Monongahela	...	.06	.40	...	...	...	...	.41	...	...	...	...	.16	.33	...	.20	T.	.81	.01	...	...	...	.29	...	...	...	.81	...	...	.90	4.38
Buckhannon	do	T.	.80	.10	...	...	...	.35	...	...	...	...	...	...	...	...	.24	.17	.60	...	...	...	.16	.05	...	...	...	.50	...	.10	.25	3.32
Cairo	Little Kanawha	...	*	.42	...	...	...	.05	...	...	...	...	...	.12	.21	...	.20	.30	...	.18	...	...	.10	...	...	...	.12	1.15	...	.40	.52	3.77
Central Station	Middle Island Creek.	.06	.31	.04	...	...	...	.41	...	...	T.	...	...	.20	*	...	.06	.10	.75	T.	...	...	.11	.05	.07	...	.16	.97	T.	.56	.07	3.92
Charleston ‖	Great Kanawha	...	1.32	.17	...	...	...	.16	.08	...	...	...	...	.12	.27	.03	.05	.15	.50	...	...	...	.19	.10	...	...	T.	.90	...	.14	.10	4.28
Creston ‖	Little Kanawha	...	.66	.09	...	...	...	.27	.06	...	...	...	...	.02	.40	...	.18	.11	.67	...	...	...	.05	T.	...	.08	...	1.01	.11	.05	.23	3.99
Cuba	Sand Creek	.03	.45	...	...	...	...	.35	...	T.	...	...	...	.37	...	.12	...	.55	.35	...	...	...	T.	...	.13	...	.27	1.08	T.	.60	.16	4.46
Davis ‖	Monongahela	...	.28	.70	...	...	...	...	.32	...	...	...	...	.65	...	...	.20	...	.90	T.	...	...	...	.50	...	.05	T.	.40	.10	...	.40	4.50
Doane	Big Sandy	.06	1.40	...	...	...	...	.43	...	...	...	...	...	.31	...	.80	...	.80	.16	...	...	...	.25	...	...	.04	...	1.67	...	.50	...	6.42
Elizabeth ‖	Little Kanawha	...	.42	.08	...	...	...	.29	.14	...	...	...	...	.07	.14	...	.06	.30	.80	...	...	...	.06	.11	...	.05	...	1.01	.44	.26	.29	4.52
Elkhorn	Big Sandy	2.00	.18	...	...	...	...	.21	.17	...	...	...	...	.38	.45	...	...	.75	...	...	...	.18	.23	...	...	...	1.45	.12	1.00	.04	...	7.16
Elkins	Monongahela	T.	.40	.05	...	...	...	.26	...	...	T.	...	.08	.06	T.	.03	...	.82	T.	.01	...	...	.32	T.	.09	...	.14	.14	T.	.19	.08	2.67
Fairmont ‖	do	...	.15	.21	T.	...	...	.10	.22	...	.01	T.	...	.13	.01	.02	.15	T.	1.28	.02	...	...	...	.14	...	.03	.01	.56	.34	.03	.63	4.04
Glenville ‖	Little Kanawha	...	.45	.15	...	...	...	.18	...	...	...	...	...	...	.10	.03	.30	.08	.60	...	...	...	T.	.20	...	...	...	.60	.08	...	.38	3.15
Grafton	Monongahela	.01	.50	.07	...	...	...	.34	...	...	...	...	...	.12	.61	...	.16	.03	.17	.03	...	...	.23	.08	...	...	.04	1.01	...	.22	.33	3.95
Green Sulphur Spgs.	Great Kanawha	.12	1.53	.01	...	...	...	.27	...	...	...	...	...	.20	.10	...	.26	.07	.37	...	...	...	.17	T.	...	.02	.01	.85	...	.28	.29	4.55
Hinton ‖	do	...	1.12	.36	...	...	...	...	.22	...	...	...	...	...	.30	...	.18	.10	.66	...	...	...	...	.20	...	...	...	1.02	.24	...	.42	4.82
Holcomb ‖	do	...	...	.40	...	...	...	.63	...	...	...	...	...	...	.06	.75	...	*	.62	...	...	...	.54	...	...	...	...	.52	...	...	.68	4.20
Huntington	Ohio	...	.84	...	...	...	...	.24	...	...	...	...	...	.44	.04	...	.14	.04	.66	...	...	...	.30	.08	...	.02	.10	1.58	...	.68	.18	5.34
Lewisburg	Great Kanawha	T.	1.34	T.	...	...	...	.32	...	...	...	...	...	.35	...	...	...	.18	.45	...	...	...	.28	...	...	...	...	.71	...	.29	.20	4.21
Logan	Guyandotte	.15	1.26	...	...	...	...	.34	...	...	...	...	...	.41	.01	...	...	.08	.24	...	...	...	.19	T.	.28	...	.03	1.78	...	.45	.02	5.24
Lost Creek	Monongahela	T.	.60	T.	...	...	...	.30	...	...	...	...	...	T.	.04	.09	...	T.	.84	...	...	...	.20	T.	...	T.	T.	1.02	...	.05	.21	3.35
Madison ‖	Great Kanawha	...	1.42	.03	...	...	...	...	...	...	...	...	...	.18	.33	.03	.03	...	...	...	...	...	.30	...	...	.03	...	1.15	.22	.30	.10	4.12
Mannington	Monongahela	T.	.43	.03	...	...	...	.32	T.	...	.03	...	.04	.32	.77	.03	.03	.01	.97	.01	...	...	.16	.07	.05	.01	.18	.90	...	.33	.54	5.23
Marlinton	Great Kanawha	...	.30	...	...	...	...	.35	...	...	...	...	...	.07	...	.17	.26	.18	.39	...	...	...	.42	...	...	.29	...	.39	...	.20	.12	3.17
Morgantown	Monongahela	T.	.34	T.	...	...	...	.25	...	...	...	...	...	.18	.02	.09	...	.06	.65	.01	...	...	.11	...	...	...	T.	1.00	...	.22	.44	3.37
Moundsville	Ohio	T.	.64	.02	...	...	...	.06	...	...	...	...	T.	.15	.05	.15	...	.34	.31	...	...	...	.06	...	T.	...	.08	.46	...	.52	.12	2.96
New Cumberland	do	...	.70	...	...	...	...	.30	...	...	T.	...	...	.21	.40	.10	.11	...	...	T.	...	...	.20	...	.10	.11	...	...	...	1.50	.21	3.94
New Martinsville	do	...	.60	T.	...	...	...	.49	...	...	...	...	...	...	.40	.07	...	.24	.28	...	...	...	...	...	...	...	.53	...	...	.41	.44	3.46
Nuttallburg	Great Kanawha	...	.60	...	...	...	...	.20	...	...	...	...	...	...	...	.20	.12	...	...	...	...	...	.16	...	...	...	T.	.95	...	.34	.48	3.06
Parkersburg	Ohio	.11	.26	...	...	...	...	.34	...	...	T.	...	...	.20	T.	.01	...	.96	T.	...	...	...	.11	...	.05	...	.67	.22	T.	.31	.78	4.02
Parsons	Monongahela	...	.20	T.	...	...	...	...	...	...	...	...	...	.01	.05	.50	...	.25	...	.29	...	...	.20	...	.10	...	...	.35	...	.25	.78	2.95
Philippi	do	.03	.64	.20	...	...	...	.25	...	...	.03	...	...	.02	T.	...	.12	.10	.50	T.	...	...	.14	.07	.02	...	.03	.72	...	.13	.48	3.48
Pickens	do	.31	.54	.10	...	...	...	.98	...	...	...	...	...	T.	.23	.21	T.	T.	.84	T.	...	...	.36	.14	.16	...	...	.11	...	.14	.12	4.24
Pineville	Guyandotte	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
New York.																																
Point Pleasant ‖	Ohio	...	.40	.04	...	...	...	.10	.12	...	...	...	...	.28	.10	...	.18	.04	.38	...	...	...	.14	.10	...	...	.04	1.30	.14	.40	.22	3.98
Powellton	Great Kanawha	.03	.90	...	...	...	...	.30	...	...	...	...	...	.10	.03	.09	.19	.08	.48	...	.19	.08	.22	.10	...	...	.08	.99	...	.20	.21	4.27
Princeton	do	2.00	.40	...	...	...	.15	.25	...	...	...	...	...	.10	.15	.20	.40	...	...	...	...	1.00	.40	...	...	...	2.00	.10	...	.85	...	8.00
Robertsburg ‖	do	...	.70	.15	...	...	...	.30	.10	...	...	...	...	.56	.08	...	.14	.05	.60	...	...	...	.30	.03	...	.05	T.	.95	...	.50	.30	4.81
Rowlesburg ‖	Monongahela	...	.26	.78	T.	...	...	...	.38	...	...	T.	...	.12	.04	...	.16	...	.64	.04	.01	...	...	.36	...	.06	...	.58	.2	...	.60	4.23
Ryan	Great Kanawha	.02	1.01	.04	...	...	...	.36	...	.01	...	...	...	.15	.48	.32	...	.43	.40	...	...	...	.21	...	.05	...	.01	.58	.01	.64	.01	4.73
St. Marys ‖	Ohio	...	.22	.10	...	...	...	.22	.21	...	.03	...	...	.05	.16	...	...	.14	.55	...	...	...	T.	.12	...	.16	T.	1.45	.07	.20	.46	4.14
Smithfield ‖	Fishing Creek	...	.12	.27	...	...	...	.17	.13	...	T.	...	...	.19	.12	...	...	.43	1.05	...	...	...	...	.34	...	...	.09	.60	.81	.25	.67	5.24

TABLE 2.—*Daily precipitation for April, 1912. District No. 3*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
New York—Con.																																
Spencer ‖	Little Kanawha		.64	.16				.16	.16					.13	.37	.23		.21	.59				.09			.14		.70			1.03	4.61
Sutton	Great Kanawha		T.					.48							.21	T.		.44							T.		.58		.28	T.		1.99
Terra Alta	Monongahela																															
Union ‖	Great Kanawha		1.70	.10					.40					T.	T.		.20	.14				.35			.11		1.30			.42	4.72
Valley Fork	do																															
Webster Springs	do																															
Wellsburg	Ohio	.05	.57	.17				.37					.02	.12	.11			.57	.08				T.		.12		.30	.20		1.07	.35	4.10
Weston ‖	Monongahela																															
Wheeling ‖	Ohio		.40	.30	.02			.05	.35		.05			.28	.20	.07	T.	.04	.70	T.				.06		T.	T.	.60		.66	.45	4.23
Williamson ‖	Big Sandy		1.90	.06				.32	.12					.08	.26			.26	.52				.14	.22				2.52	T.	.24	.20	6.84
Ohio.																																
Amesville	Ohio	.05	.45					.27						.26	T.		T.	.70	.29	T.			T.	.02	.06		.54	.48	T.	1.18	.05	4.35
Bangorville	Muskingum	.10	.98				.68	T.					T.	.06	.16	.56		.43	T.				.33				.30		.02	1.41		5.03
Bellefontaine ‖	Great Miami		.03	.35				.03			.02			.04	.07	.31		.24	.81				.04	T.			.00	.26		.34	1.51	4.11
Bladensburg	Muskingum																															
Cadiz	Ohio	.08	.74	.15				.43			.03		T.	.44	.06			.63	.01				.24		T.		.53		T.	1.44	T.	4.78
Cambridge	Muskingum	T.	.81	T.				.43						.17	.20			.63	.03				.20				.73	.35		.56		4.11
Camp Dennison	Ohio	.10	.68					.20			T.			.37	.01	.37		1.26	T.				.60		.07		1.15	.13	.10	.67	T.	5.71
Canal Dover	Muskingum		1.02					.64				.31		.08	.45	.48		.10	.28				.13	.07	T.		.16	T.		1.14	.42	5.28
Canton ‖	do		.54	.68				.32	.07	T.	.03			.48	.01	1.24		.01	.45	T.				.04		.03		.05		.82	1.18	5.95
Cardington	Scioto		.80					.40			.05			.14		1.80		.43					.16				.25			.83		4.86
Chillicothe ‖	do		.35	.41				.28						.10	.18	T.		.25	.66				.21					1.85		.88		5.17
Cincinnati	Ohio	.32	.51				.09	.10			.01		.23	.17	.43		.02	.95				.25	.27				1.58		.52	.17		5.62
Circleville ‖	Scioto		.44	.24				.25			.04			.17	.29	.04		.28	.32				.05				.07	1.93		.74	.08	4.94
Clarington	Ohio			.70				.45	.05		.02		T.	.25	.02	.02		.40	.40				.10		T.	.02	.26	.45		.50	.60	4.24
Columbus	Scioto	.23	.79				.02	.17			.04			.16	.08			.73	T.				.01		.01		.94	.01	.13	.87	.01	4.20
Coshocton ‖	Muskingum		.62					.45	.01		.02				.51	.72			.33		.45		.05					.63		.02	.28	4.99
Dayton (1)	Great Miami	.20	.68				T.	.10			.04		.04	.23	.53			1.17	T.			.11	.09		T.		.81		.31	.62	.01	4.94
Dayton (2)	do	.14	.93					.16			.06			.30	.25	.46		1.03					.23		.02		1.02		.24	.84	.02	5.70
Delaware ‖	Scioto	.06	.85	.10							T.		T.	.02	.08	.50		.40					.28	T.		T.	.38	T.	.30	.61	.23	3.81
Demos	Ohio	.02	.75	.02				.36	.02		.11		T.	.24	.02			.84	.04	.01			.16	.35	T.	.01	.30		.02	1.50	.05	4.82
Dennison	Muskingum		1.36	.07				.50			.05			.05	.08			.11	T.	.03		.53		.04		.12	.24			1.63	.28	5.09
Frankfort	Scioto		.50				.10							.28		T.		.63	T.			.15		.05			1.20	.05	T.	1.20		4.16
Gallipolis ‖	Ohio		.40					.18	T.					.33	T.		.11	.05	.27				.18	T.				1.30		.40	.14	3.36
Garrettsville	Mahoning	.06	.89	.04				.53			.04		.06	.05	.31	.45		.32												1.64	.35	4.74
Granville ‖	Muskingum		.50	.45				.50	T.		.05			.06	.15	.02		.12	.35				.08	.02		T.	.08	.94		.75	.35	4.42
Gratiot	do	.10	1.00					.40			.10		T.	.08	.34			.43	.01				.32				.90	.02	.03	.72		4.45
Green	Ohio	.82	.80					.20						.25					.72				.40	.24	T.		.44	.30	.15	.05		4.37
Green Hill	Muskingum	.11	.78	T.				.44	T.		.04		.27	.05	.14	.24		.15	T.				.11		T.		.09		.05	1.09	T.	3.56
Greenville ‖	Great Miami		.63	.46				.27	.02					.21	.20	.24		.14	.48				.09				.08	.38		.35	.63	4.18
Hamilton ‖	do		.34	.59				.27			.02			.14	.30	.22		.96	.50				.37		.04		.45	1.87	.44		.71	7.22
Haydenville	Ohio	.07	.64			.28								.25					.05				.20			1.00		.50		1.50		4.49
Hillsboro	Scioto	.13	.07	.04				.08			.02			.86						.06		T.	.27				1.64		.12	.08		3.37
Ironton	Ohio	.12	.54					.22						.66	.34	.25		.17	.08				.10	.26	.01		1.40	.86		.83		5.84
Jacksonburg	Great Miami																															
Kenton	Scioto		.85					.17							.27	.40		1.00								.12			.75		.13	3.69
Killbuck	Muskingum	.20	.80	T.				.60					.05	.20	.28	.20		.50	.20	.02			.03				.41			1.45	.05	4.99
Lancaster	Ohio	T.	.68					.42						.16	T.	T.		.75	T.				.56		.07		1.44	.10	T.	.57		4.75
McConnelsville	Muskingum	.04	.49					.30			.01		.08	.18	.14	.12		1.35	.14				.16		.08		1.05		.28	1.12		5.54
Marietta	Ohio		.38					.40			.07			.16	.01			.65	.09				.12		.18		1.04	.30	.01	.42	.04	3.87
Marion	Scioto		1.15					.06						.06	.38	.35		.82	T.				.06				.25		.03	1.12		4.28
Milfordton	Muskingum	.15	.25					.25						T.	.14	.05		.87	T.				T.				.30		.12	1.62	T.	3.75
Milligan	do		.70					.44						.20	.08			.94	.02							.11	.99	.17	.05	.97		4.67
Millport	Ohio	T.	.94					.30	T.		.07		.10	.18	.21	.11		.34	.06				.18		T.		.02	.11		1.40	.05	4.07
Neillie	Muskingum		1.12					.50			T.			.12	.33	.35		.50					.03				.45	.06	.20	1.25	.26	5.17
New Alexandria	Ohio	T.	2.00	T.				.90					.50	1.20						1.30		T.	.20				.50	T.	1.50			8.10
New Berlin	Muskingum	T.	.85					.45	T.				.05	.30	.30	.45		.46	T.				.18				T.			1.65	.20	4.89
New Waterford	Ohio		.90					.55								1.05		.30					.20		T.		.30			1.36		4.66
O. S. University	Scioto	.15	.90					.24			.06			.18	.17	.01		.84	T.				.09				1.03	T.	.10	.92		4.69
Pataskala	Muskingum	.15	.75					.46	T.		.12		T.	.10	.08			.39	.02				.20		.01		1.22		.14	1.24	.10	4.98
Peebles	Ohio	.07	.55	T.				.36			T.			.65				.98	.02			T.	.24	.02	.03	T.	2.03	.35	.03	1.37	.10	6.80
Philo (1)	Muskingum		.58					.25			T.			.12	.08			1.62					.23		T.		.72	.22	.05	.98		4.85
Piqua ‖	Great Miami		.65	.42				.12						.53	.11	.08	.27						T.		T.		.03	.55		.70	.40	3.86
Plattsburg	do	.07	.61					.10						.58	T.	.61	.98						.15		.04		.97		.14	.87		5.12
Portsmouth ‖	Ohio		.60	.27				.26						.19	.50			.19	.11					.21		.06		1.63	.09	.59	.23	4.93
Prospect ‖	Scioto																															
Rittman	Muskingum																															
Shenandoah	do	.21	.69					.32			.03		.52	.03	.40	.04		.42	T.				.13		T.		T.			1.18	.04	4.01
Sidney	Great Miami	.35	.78					.28						.18	.16			.54	.05				.05				.25		.08	1.28	.08	4.08
Somerset ‖	Muskingum		.31	T.				.44	T.		T.			.03	.18	.02		.37	.44	.02			.10	.18		.02	.08	1.26		.62	.02	4.09
Springfield	Great Miami	.20	.79	T.				.14			.05			.27	.17	.19		1.10		T.			.19		.08		.75		.14	1.20	.01	5.28
Summerfield	Ohio	.04	.71	.01				.43			.07		.06	.18	.04	.05		.62	.11				.14		.02		.49	.26	.03	1.64	.09	4.99
Syracuse	do																															
Thurman	do	T.	.58					.25						T.	.46	T.		.46					.19				.25	.98		.62	T.	3.79
Urbana	Great Miami	.18	.90					.19			.06			.15	.60	.09		1.26					.18				.72		.17	.88	.04	5.42
Warren	Mahoning	.04	1.28					.54					.19	.07	.21	.97		.16	T.				.47		T.				T.	2.48	.12	6.53
Waverly ‖	Scioto		.32	.21		.04		.26	.02		.04			.14	.06	.14		.43	.60				.10			T.	.01	1.35	.01	.79	.31	4.83
Waynesville	Great Miami	.02	.70					.23			.08			.25		.05		1.22	T.				.20		T.		1.85		.11	.48	.05	5.24
Wooster	Muskingum	.04	.90					.64	T.				.40	.06	.80	.60		.60	T.	.02			.03	T.			.02		.02	1.30	.15	5.58
Youngstown ‖	Mahoning	.02	.42	.70				.40	.05		.09			.22		.94			.23					T.		.03				.92	.80	4.82
Zanesville ‖	Muskingum		.50	.52				.28	T.		T.			T.	.14	T.		.22	.50					T.		.04	T.	.91		.60	.05	3.76
Indiana.																																
Anderson	West Fork, White.	.08	.85					.25			T.		.20	.40				.90					T.				.35		1.25	.37	T.	4.65
Attica ‖	Wabash		.64					.27			T.			1.65	.04			.11	.62	T.	.04	T.	.04				.30	.11	T.	.80	1.25	5.87
Bloomington ‖	West Fork, White.	.02	.44	.88				.85			.08			.25	.30			.75	.50	T.	.02		.11	.03			.55	.98		.68	.18	6.62
Bluffton ‖	Wabash		.74	.23				.23						.37		.01		.14	.53	.02			.01	.01	.04		.06	.05		.56	.96	3.96
Butlerville	East Fork, White.	.22	.66											.25	.26			1.12	.05			.03	.51				2.57		.16	.87		6.70
Cambridge City ‖	Whitewater		.52	.81				.66			.05			.15	.20	.09		.22	.55				.14					.68		.52	.70	5.29
Columbus ‖	East Fork, White.		.17	.50	.04			.58			.04			.18	.33			.39	.92				.57				.39	1.36		.66	.03	6.16
Connersville	Whitewater	.18	.70					.28						.45	.35			.80									.78		.33	.42		4.29
Crawfordsville	Wabash	.52	.75					.17					.40				T.	.50	.10								.45		1.05	.80		4.74
Delphi ‖	do		.38					.26	T.		.01			1.00	.03	.15		.04	.69	.03	.05		.54	.08			.20	.04		.62	.37	4.49
Eminence	West Fork, White.	.40	.80					.25					T.	T.	T.			.94	.08				.25				.80		.72	1.20		5.44

TABLE 2.—*Daily precipitation for April, 1912. District No. 3*—Continued.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total.
Indiana—Con.																																
Evansville	Ohio	.65	.18				.68	.02		T.			.33	.26	.05	T.	.16	.83		T.		.61	.16			.58	1.29		.77	.45	T.	7.02
Farmersburg	Wabash	.25	.70				T.	.10			.04		.10	.14				.53	T.		T.	.03	T.			.90		.71	.31	T.	3.81
Farmland‖	West Fork, White.		.84	.58				.52						.41	.06			.15	.60	.02			.11		T.		.35		.47	.26	4.37
Forest Reserve	Ohio	.18	.59					.07						.50	.02	T.		1.02				T.	.70				1.69	.02	.02	.93	.01	5.75
Greenfield	East Fork, White.	.22	.96					.63			T.			.15	T.			.70					.05				1.02		.43	.35		4.51
Greensburg	....do	.32	.28					.40						.20	.40			.30	.60				.45						.75	1.25	.05	5.00
Huntingburg	Wabash	.13	.85					1.06						.35				1.37				.09	1.23				2.05	.06	.12	.75		8.06
Huntington	....do	.25	.10					.22					.65	.05	T.			.50	.60				.80	.03		.10			.45	.60	.05	4.40
Indianapolis	West Fork, White.	.46	.83				.36	.08		.03	.01		.16	.01	.08			.73	T.	T.	T.	.05	T.			T.	.60		.78	.44		4.62
Jeffersonville	Ohio	.22	.87				T.	.25						.61	.22			1.11				.02	.84				3.19	.04	.59	.70	T.	8.66
Judyville	Wabash	.47	.12				T.	.41		T.	T.		.58	T.	.04			.75	.04	T.	.04	.03	.04				.31	.10	.80	.01		3.74
Kokomo	....do	.35	.12					.17			T.		.65	.17	.44			.47	T.				.14				.19		.61	1.02	T.	4.33
Lafayette‖	....do	.42	.15				T.	.23			T.		.78	.20				.66	.10		.03	T.	.04				.34		.75	.52		4.22
Laurel	Whitewater		.04	.33				.25			.03			.36	.55	.03		.55	.45				.33				.30	1.39		.65	.53	5.79
Logansport	Wabash		.28					.22						.96		.04			.48	.05	.04		.25	.18		.07	.15			.40	.36	3.48
Madison	Ohio	*	1.00				.10	.06						.54	.31	.07		.90					.53				1.80	.10	.14	1.14	.04	6.73
Marengo	....do	.83	T.					.50						1.00	T.			.78		T.			.40				2.88		.13	1.05		7.57
Marion‖	Wabash		.74	.35				.17						.60	T.	.03		.13	.37	.03				.08	T.		.10	.14		.80	1.12	4.66
Mauzy	East Fork, White.	.26	.91					.49						.44	.12			.75	T.			T.	.10				.81		.43	.41	.03	4.75
Monticello‖	Wabash		.20					.50	T.					2.00	T.			.10		T.	.05		.26	.06		T.	.15			.35	.75	4.42
Moores Hill	Ohio	.13	.50					.18						.60	.30	.25		1.30				T.	.40		.02		2.60	.02	.09	.38		6.77
Mount Vernon‖	....do	.03	.80	.30				.61						.42	T.		.02	.25	.35				.16				1.10	.30		.58	.10	5.02
Nashville	East Fork, White.	.19	.83				.74	T.		.05			.09	.78				.95	T.	T.		T.	.25			.01	1.17		.45			5.51
Paoli	....do	.14	.59					.50						.33	.06			.80				.06	.75				1.92	T.	.16	.57	.11	5.99
Princeton	Wabash	.05	.73				.63							.23	.18			.76				.08	.27				2.90		.53	.26		6.62
Richmond	Whitewater	.38	.60				.18	.13		.02	.02		.08	.24	.77			.81				.03	.05		.05	T.	.70		.42	.53		5.01
Rochester	Wabash	.16						.30			T.			.01	.35			.35	.12			T.	.19				.07		.01	.65		2.21
Rockville	....do	.55	.80					.33			T.		.33	.20				.56	T.		T.	T.	T.			T.	.63		1.57	.30	T.	5.27
Rome	Ohio	.22	1.20					.38						.60	.08			.46			T.	.04	1.08				1.57	.37	T.	1.57	.01	7.58
Salamonia	Wabash	.40	1.05				.50				.03			.25	.18			.85	.02				.03		.01		.25		.32	.60	.02	4.51
Salem	Ohio	.15	.55					.66						.52	T.			1.05				.03	.35				2.15		.18	.67	.04	6.35
Scottsburg	East Fork, White.	.19	.58					.38						.60	.11			1.12					.71				2.51		.21	.47	T.	6.88
Seymour	....do		.88					.47						.37	.05			1.41	T.			.01	.32		T.		2.86		*	.95	.05	7.37
Shelbyville	....do	.30	1.01					.71			.02			.41	.38			.76				T.	.23				.75		.31	.57	.10	5.55
Shoals‖	....do		.30	.50							T.			.12	.27			.62	.48				.78				1.20	1.80	T.	.71	.12	6.90
Terre Haute	Wabash	.38	.60	.47			.06	.24			.02		.10	.04				.92			.08		.14				1.18		1.50	.44	.02	6.19
Veedersburg	....do	.62	.27	T.			T.	.12			.03		.80	.15				.70	.10		.04	.03	.03				.35		1.04	.72	.03	5.03
Vevay	Ohio																															
Vincennes‖	Wabash	.05	.20	.85				.40						.65	.20			.10	.60			.10	.35	.05			1.15	.95	T.	.30	.10	6.05
Washington	West Fork, White.		.84					.82					.28	.24	.16			1.12				.06	.41				2.62		.45	.30	.01	7.37
Whitestown‖	....do		.68	.56				.17	T.		.02		T.	.02	.02	T.		.04	.53	.01	.01		.03	.01			.20	.20		1.08	.10	4.28
Winona Lake	Wabash	.23					T.	T.					.73		.14			.34	.16				.53				.05		.01	.47		2.66
Worthington	West Fork, White.	.22	.80					.47			.08			.20	T.			.53	T.			.03	.20				1.40		.49	.24	T.	4.66
Illinois.																																
Albion	Wabash	.10	.86					.30						.30	.16			.94				.07	.45				2.25		.18	.18		5.79
Carmi	....do																															
Casey	....do	.33	.75				T.	.22					1.07	T.				.78	T.				.35				.83		1.03	.12		5.48
Charleston	....do	.45	.31				.33			.02			.25	.01			.04	.38		.26		.08				.30	.06		1.05	.75		4.29
Danville	....do	.58	.18	.01			.05	.27			T.		.61	.05				.78	.05		.01	.05	.02				.51		.81	1.43	.01	5.42
Equality	Ohio	1.07	.10					.47		T.	.02		.53			.16	.12	.90		T.	T.	T.				.05	2.58		.43	.63	T.	7.06
Fairfield	Wabash	.06	.88					.20					T.	.20	.16			.96				.09	.26				2.48	.04	.09			5.42
Flora	....do	T.	.90				.03	.12				T.	.13	.34				.63		T.		.09	T.			T.	2.35		.30	.03		4.92
Golconda	Ohio	.99	1.12				T.	.56					T.	.42			.08	.34		T.		.19	.27			.29	1.14		.83	.81		7.04
Hoopeston	Wabash	.23	T.				.01	.48					.39	.02	.19			1.22	.07		.09	.01	.73			T.	.29		.56	1.48		5.77
McLeansboro ‖	Ohio		.36	.39										.40	.22			.34	.12			.10	.80				2.86	.38	.05	.37		6.45
Metropolis	....do																															
Montrose	Wabash	.32	.48				.07	.25		T.			.87	.03				1.25				.07	1.05				1.45		.63	.14		6.61
Mount Carmel ‖	....do	.02	.28	.62				.66						.40	.40			.04	.46			.06	.70	T.			1.82	.86		.38	T.	6.70
New Burnside ‖	Ohio	.14	1.10	.05				.45		T.				.28	.06		.21	.19			T.	T.	.25				1.35	.68	T.	.98	.10	5.84
Newton	Wabash	.08	.93				.03	.16			.23		.39	.16				.69				.06					1.51		.74	.04		5.02
Olney ‖	....do	T.	.05	.69				.15			T.			.31				.06	.78		T.	T.	.11	T.			.99	.84		.42	.10	4.50
Palestine	....do	.20	.64		.07		.07	.18			.04		.10	.10	.04			.77	T.	T.		.07	T.				1.70		.40	.14	.01	4.53
Paris ‖	....do		.70	.05				.15						.60				.22	.55		T.	.10	T.				.55	.35	1.42	.30	.20	5.19
Philo	....do	.58	.04				.27			T.			.68		.15			.97				.22	T.				.50		.73	1.08		5.22
Rantoul ‖	....do		.29	T.				.35			.04			.52	.41			.17	1.20		.04		.50				.22	.13		.90	1.14	5.91
Rileyville	Ohio	.22	.83				T.	.48					.13	.21	.16		T.	.28		T.	T.		.20			.15	2.90		.18	.33		6.07
Shawneetown ‖	....do	.12	.96	.07				.34			T.			.64	.01			.07	.42			.08	.75				1.23	1.10	T.	1.10	.05	6.94
Tuscola	Wabash																															
Urbana	....do	.53	.01				.74			T.			.27		.32			1.52	.01	T.		.03					.16		.70	1.31		5.60
Kentucky.																																
Alpha	Cumberland	3.25	T.					.75						.45	.10	1.86		.60	T.		T.		.60				3.90		2.15	T.		13.66
Anchorage	Ohio	*	1.12												.96			.76				T.	1.25				3.50		2.04			9.63
Bardstown ‖	Salt		1.84	.12				.36						.92	.10	.06		.58	.54	T.			.68	T.			3.32	1.70		1.84	.15	9.21
Beattyville ‖	Kentucky		1.68	.42				.36						.34	.18		.10	.24	.26				.64					1.44	.16	1.06		6.88
Beaver Dam ‖	Green		1.90	.15				.52						.75	.36			T.	.64				.60				.52	.55		1.15	.22	7.36
Berea	Kentucky	.62	1.12					.32					T.	.50		.28		.20		T.	T.						.04	1.36		1.15	T.	5.59
Blandville	Mississippi	1.72	.62				.13	.38			.03		.26					.34				T.	1.04			.08	.92	.51	.82	.96		7.83
Bowling Green ‖	Green	T.	4.54					.60						.60	.03			T.	.66				.58				.30	1.68	.10	2.40		11.49
Burnside ‖	Cumberland		3.40	.03				.50						.18	.20	.02	.20	.14	.78				.26					1.64	.02	1.58		9.07
Calhoun	Green	.67	1.55					.48			T.	T.	T.	.62	.12			.21		T.		.10	1.12			T.	1.11	.15	.49	1.08		7.70
Catlettsburg ‖	Big Sandy		.82	.04				.22	.02					.22	.20		.10	.06	.50				.30	.04		.04	.10	1.70	.02	.70	.10	5.18
Earlington ‖	Green	.10	1.90	.02				.04						.80	.14				.03				.36				1.19	.47	.03	1.57	.04	6.69
Edmonton	....do	1.17	2.16					.56						.50	.02			.42					.23				.50	1.00	.01	1.30	.02	7.89
Eubank ‖	Cumberland		2.70	.09				.48						.33	.25	.05	.40	.06	.04				.13					1.20		1.35		7.07
Falmouth ‖	Licking		.70	.20				.31						.30	.22			.45	.59				.40			.15	.43	1.60		1.37	.34	7.06
Farmers	....do							.32						.76	.35			.32	T.									2.50		1.03		5.28
Frankfort ‖	Kentucky		1.44	.28				.26						.29	T.	.41		.43	.04				.93	.02			.46	2.31		1.18	.12	8.17
Franklin	Green	1.48					T.	.51			T.			.26	T.		.10	.24		T.	.04		.19			T.	.30	1.98		2.15		7.25
Greensburg ‖	....do		2.55	.02				.55						.54	.06			.04									.05	.90		1.38	.02	6.11
High Bridge ‖	Kentucky		1.43	T.				.30						.46	.07		.11	.46	.28				.78				.12	1.51		1.16		6.68

TABLE 2.—*Daily precipitation for April, 1912. District No. 3*—Continued.

Stations.	Watershed.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
***Kentucky*—Con.**																															
Hopkinsville	Cumberland	.05	6.30					.95						1.00	.65			.07	.60		.02		.20				.40	1.40	.05	1.50		13.19
Irvington	Ohio	.36	1.40					.15						.41	.10			1.44				.05	1.39				2.00	.10		1.10	T.	8.50
Leitchfield	Green	1.85	.05				.63							.83	.24		*	.58					1.15				.78		*	1.82		7.93
Lexington	Kentucky	.53	.65				T.	.29					.05	.51	.04	T.	.24	.26	T.		T.		.64			.01	2.28	.15	.38	.93	T.	6.89
Loretto	Salt	.35	1.31	T.				.55						.32		.39		.59		T.			.50				.19	.32		1.80	.02	6.24
Louisville	Ohio	.57	.54				.08	.18					.08	.45	.20		.42	.77	T.		T.	.31	.74			.04	2.93	.01	.61	.67	T.	8.60
Marion	do	.88	1.37					.90					.82	.09				1.06		T.	T.	T.	1.73			.20	1.14	.44	1.00	1.18		10.81
Maysville	do		.71	.30				.28						.18	.20			.12	.35				.39	.03			.20	2.07	.04	1.04	.21	6.12
Middlesboro	Cumberland	1.17	2.88					.55						.45		.10		1.22					.90				.18	1.95		1.91		11.28
Mount Sterling	Licking		1.32	.03				.38						.39	.24		.56	.11	.24				.46				.18	2.30	.02	.75	.29	7.27
Owensboro	Ohio	.08	1.28	.16				.45			T.			.45	.04			.07	.30				1.15				1.00	.72		1.70	.04	7.44
Paducah	do	.16	2.00	.10				.90			T.			.40	T.			.40			.40		1.38				1.24	.12		1.82		8.92
Pikeville	Big Sandy		2.76	.20										T.	.12		T.	.10	.45				.18	.30				1.52	.36	.20	.20	6.39
Richmond	Kentucky		1.40	.01				.37						.56	.50	T.	.25	.13	.15	.01		T.	.54				T.	1.43		1.02	.10	6.47
St. John	Salt		1.75	.12				.42						.48	.24			.60	.50				.99				.46	1.10		1.60	.14	8.40
Scott	Licking	.20	.60					.29			.02			.57	.01			.63	T.			T.	.48		.01		1.56	.10	.05	.96	.06	5.54
Shelby City	Kentucky	.38	1.11					.39						.59	.04	.05		.22	T.				.67				.10	.72		.96	T.	5.23
Shelbyville	Salt	1.00		.25				.58						1.20	.25			.20	.65				.35				.70	1.90		1.65	T.	8.73
Taylorsville	do	.18	1.01					.34						.84	.13			.52			T.		.58				2.73	.48	T.	1.50		8.31
Williamsburg	Cumberland		2.90					.05						.10	T.		.15	.40	.45				.62	.38				2.89	.05	1.10	.05	9.14
Williamstown	Licking		.58	.18				.26						.21	.29			.31	.69				.44			.07	.31	1.58		1.31	.34	6.57
Tennessee.																															
Ashwood	Tennessee	1.30	2.10				T.	.63		T.			.10	T.	.20	.18	.55	.70			.17		.38				.32	2.00	T.	1.55		10.18
Benton	do	.46	.05				T.	.43			T.			T.	T.	.68	.10	.32	.12	T.	.15	T.	1.80				T.	1.58		.66		6.35
Bird's Bridge	do		1.30	.04				.22	.18					.26			1.36	.34	.10		.10	.08	1.04	.19				1.10	.04	.42	.95	7.72
Bluff City	do		1.91	.10				.22	.33						.07		.35	.26	.24			.22	.39	.29				.72	.12	.03	.89	6.14
Byrdstown	Cumberland	1.42	1.58											.16	.12	.20		.67					.51				.55	1.89		1.28		8.38
Carthage	do	.06	3.10	.06				.73						.28	T.	.30	.28	.06	.95	T.	.05		.52				T.	2.24	.03	1.24		10.00
Cedar Hill	do	2.00	1.15				T.	.85			T.		.03	.60	.06		.05	.35	T.	T.	.03	.02	.01			T.	.40	2.30	.01	2.50	.06	10.42
Celina	do		2.04					.51			T.			.48	.16	1.20	.40	.03	.42		T.		.47					3.42		1.88		11.01
Center Point	Tennessee																														
Charleston	do	.20	.40					.40	.05		T.			T.		.82	.52	.35			T.	.40	1.30	.20				1.60	.45	1.20	.40	8.20
Chattanooga	do	.77	.07				.04	.26			.09			.01	.41	.26	2.19	.06			.18		1.62				.08	2.15		1.36		9.55
Clarksville	Cumberland	1.55	1.51					.89			T.		.12	.35	.07		.02	.49	T.				.11			.04	.40	2.30	.30	2.07		10.22
Clinton	Tennessee		2.00	.47				.40	.13					.12	.07			.74	.55		.36	.05	.63	.16				2.00	.05	1.48	.13	9.34
Crossville	do	2.00	2.20	T.			T.	.53						.02	.05	.35	.55	.20			.19		.77				.40	2.27		1.65		11.18
Dandridge	do		2.10					.15	.16								.15	.20	.22		.12		1.10	.25			1.40			.40	.36	6.61
Decatur	do	.78	.77				T.	.44			.01			.03	.35	.30	.04	.80	T.		.15		2.00				.06	1.78	.03	.69	.51	8.74
Dickson	Cumberland	1.40	1.37					.60						.40		.10											1.50	3.00		1.80		10.17
Dover	do	1.31	1.81			T.	T.	1.26					.13	.43	.53	T.		.81		T.		T.	.35			T.	.87	1.56	.68	1.28	T.	11.02
Dunlap	Tennessee	.74	.26				.03	.30			.05			.08	.25	.15	.60	1.18			.12		1.65				.20	2.00	.05	.82		8.48
Elizabethton	do		1.57					.20	.30	.04	T.			.10			.25	.37	.02				.61	.60				.50	.43	T.	1.06	6.05
Erasmus	Cumberland	2.11	2.39				T.	.88					T.	.03	.16	.54	.32	.14		T.		.22		.87				.82	2.00		1.76		12.24
Florence	do	1.60	1.73				T.	.68			T.		T.	.16	.34	.37	.26				.20		.47				.24	2.16		1.60	T.	9.81
Franklin	do	1.23	2.11					.80						.31	.08	T.	.23	.33			.26		.23				.32	2.33		1.75		9.98
Hall's Hill	do	.10	2.80					.57				T.			T.	.67	.24	.64	T.		.04	.03	.82					2.35		1.79	T.	10.05
Harriman	Tennessee																														
Hohenwald	do	.90	1.90					.41					.15	.16	.15		.60	.05			.05		.65				.35	2.50		2.70		10.57
Iron City	do	.10	.75				.10	.52			.14		.15	.05	.37	.25	1.00	T.		T.	.19		.63				T.	3.45	T.	2.12		9.82
Jefferson City	do	1.34	1.00					.43						.05	.05	.30		.32	.35		.11		1.35				.08	1.43		1.08	.26	8.35
Johnson City	do		1.70					.30	.27					.10	T.		.83	.30	.12		.07		.92	.15				.90		.29	.75	6.82
Johnsonville	do	1.52	.80				T.	.80			.01		.40	.28	.25		.10	.08	T.		.06		.04			T.	.33	1.57		1.83		8.07
Kingston	do		2.68	T.				.24	.06					.05		.14	.05	1.09	.32		.09	.05	.68	.18				2.02	T.	1.14	.51	9.30
Knoxville	do	1.57	.76				T.	.43			T.			.07	.02	.02	.13	.18			.10		1.51				.06	1.91	T.	1.22		7.98
Lebanon	Cumberland	1.63	1.88				T.	.84						.40	.25	1.04	.40	.10			.15		.14				.59	2.34		1.64	T.	11.40
Lewisburg	Tennessee	1.08	1.66				.01	.58			.04		.13	T.	.54	.05	.95	T.			.15		1.39				.26	2.40		3.36	T.	12.60
Loudon	do		2.12					.39	.13					T.		.17	.12	.35	.64			.13	1.08	.11				2.08	.14	.74	.30	8.50
Lynnville	do	.75	1.06				T.	.53					T.		.51	.21	.61	.02			.13		1.26				.41	3.41		2.94		11.84
McGhee	do		1.80	T.				.35	.12		T.			T.		.22	.36	.20	.40			.17	1.77	.12				1.70	.27	.50	.64	8.62
McMinnville	Cumberland																														
Maryville	Tennessee																														
Mountain City	do	.67	.90					.41											.65		.12		.82					.94		.54	.11	5.16
Nashville	Cumberland	2.53	1.17				T.	.87			T.	T.	.04	.12	.02		.17	.01			.10		.85				1.37	2.51	1.50	.47	T.	11.73
Newport	Tennessee		1.58	.20				.15	.20					.07		T.	.17	.26	.21		T.	.30	1.05	.73				.85	.05	T.	1.35	7.17
New River	Cumberland		3.20					.26						.15			.12	1.15					.71					2.32		1.05		8.96
Palmetto	Tennessee	.75	1.57				T.	.60			T.		.10		.51	.04	.95	T.			.12		1.03				.12	2.80		3.92		12.51
Perryville	do	1.90	2.40				.20	1.60					.30	1.00	.20		1.30	.10					.50				.50	2.80		2.00		14.80
Pinewood	do	1.05	2.20					.72					T.		T.		.30	T.			T.		.45				.70	3.15		2.60		11.17
Rogersville	do		2.86	.08				.30	.17		T.			T.	T.	T.	.30	.21	.09		.01	.06	.68	.36				1.47	.14	.39	.91	8.03
Rugby	Cumberland	1.92	1.30											.50	.08	.45		.40					.90				.15	2.47		.90	.05	9.12
Savannah	Tennessee	.70	1.15				T.	.82			.05		.10	.25	.12		.38	.02					1.00				.30	2.15		2.30	.03	9.37
Sevierville	do	1.63	.81					.40						.02	.02	.18	.02	.29	.42		.07	.07	1.86					1.53		.85	.03	8.20
Sewanee	do	.42	.11										T.		.57	.17					.12		1.99				.10	2.01		1.17		6.66
Sparta	Cumberland	1.96	1.50										T.	.55	.35			.25			.15		1.50				.10	1.95		1.80	T.	10.11
Springville	Tennessee	2.71	1.53				T.	1.57			T.		.61	.59	.57		.08	.56		T.			.15		T.		.25	1.40	.32	1.40		11.74
Tazewell	do		2.84	.12				.70	.14					.20	.22			.55	.98		T.	.10	.70	.12				1.88	.05	.96	.88	10.44
Tullahoma	do	.83	1.34				T.	.39			T.			.05	.22	.23	.80	.09			.14		.55			T.		1.95		1.03		7.62
Walling	Cumberland	.10	3.65					.40						.10	.26	.30	.35	.20			.40		.62					2.01		2.30	T.	10.69
Waynesboro	Tennessee	.70	1.36				.23	.73			.10		.05	.50	.35	.03	.60	.03		T.	T.	T.	.50				.89	4.00	T.	3.00	T.	13.07
Wildersville	do	.83	2.25				.65				.26		.15	.61			.25	.06					T.				.67	2.50		2.29		10.52
Worsham	Cumberland	4.05						.64						.45			.06	.10					.15				.65	2.00		1.55		9.65
Yukon	Tennessee																														
Alabama.																															
Bridgeport	Tennessee	.23	.51					.10	.47		.13	T.				.32	.30	1.46			.13	.07	1.30					1.76	.36	1.34		8.50
Decatur	do	.20	.28					.36	.05		.35	.15		.76	.47	.65	1.04	1.82	.02		.08	.05	.76					1.05	.55	1.03		9.67
Florence	do	.34	1.12					.66			.36	T.	T.	.06	.60	T.	.80	1.07			.20		.31					.88	.40	1.18		7.98
Guntersville	do	.36	.32					.23	.05		.18	.18		.02	.04	T.	.40	1.63	.02		.10	.04	.90				T.	1.40	.88	.40		7.15
Madison	do	.20	.13					.30				.60		.40		.55		2.00			T.	T.	1.70					1.55	.46	1.14		9.03
Riverton	do	.41	.51					.75			.31			.30	.60	.28	.07	.79			.11	T.	.60				.01	1.08	.09	2.80		8.71
Scottsboro	do	.37	.06				.21	.35			.22	T.	.02		T.	.25	1.42	.40		T.	.22		.85				.02	1.75	.58			6.72
Tuscumbia	do	.18	.55					.71			.53	.05		.10	.88		.72	1.21			.20		.51					.46	.40	1.69		8.19
Georgia.																															
Diamond	Tennessee	.46	.71				T.	.87			T.			T.	.12	.80	1.30	.30			.70		2.80					1.38		1.28		10.72
Mineral Bluff	do	.48	.19				T.	.29			T.		.11		T.	.15	.25	.30	.12	T.	.26		1.25				T.	1.60		.51	.03	5.54

TABLE 2.—*Daily precipitation for April, 1912. District No. 3*—Continued.

Stations.	Watershed.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
North Carolina.																															
Altapass	Tennessee	.06						T.							T.		T.											3.00				3.06
Andrews	do	.60	.20					.85			.01					.30	.10	.30	.30		.21		1.28					1.79		.50	.16	6.60
Asheville	do	.77	.02				T.	.03							T.	.23	.48	.13	T.		.16	T.	.96				.04	.98		.37		4.17
Banners Elk	do	.53	.37					.30									.35	.32		.18			1.00					1.20		.93		5.18
Blantyre	do	.40	T.					.10									.30		.10		.10		1.60					.90		.30		3.80
Blowing Rock	Great Kanawha	.46	.34					.27										.09			.04		1.00				T.			1.32		3.52
Brevard	Tennessee	.63	.10					.10							T.		.65	.97			.25	.10	1.65						1.00	.30		5.75
Bryson City‖	do		.97	.21				.14	.40							.45	.17	.35	.18			.19	.97	.55				.92	.54	.26	.80	7.10
Cullowhee	do	.83	.03					.24			T.			.03		T.	.12	.08	.45		.13	T.	1.28	T.				1.20		.50	.32	5.21
Eagle Nest	do	.71	.15					.22	.12							.13	.12	.17	.37			.17	1.45	.08				1.20		1.00		5.89
Hendersonville	do	.34															.50		.63		.20	.05	1.55					.95		.32		4.54
Highlands	do	.20	.48				.20							.50	.50		.70	.65	.20		.15	.20	1.40					1.28		.81	.32	7.59
Hot Springs	do	.95	.65					.25					.10			.87	.12	.27	.05		.11		1.35					.88		1.00	.45	7.05
Jefferson	Great Kanawha	1.60	.34					.63					T.					.30			.12		.85				T.	.58		.45		4.87
Marshall	Tennessee	1.05	.26					.10								T.	.18	.20	.40		.38		1.31				T.	1.04		.63	.16	5.71
Murphy‖	do	.20	.40	T.				.41	T.		T.						.70	.92	.56		.20		1.65					1.69	.06	.23	.06	7.08
Rock House	Savannah																														
Transon	Great Kanawha	.37	.34					.16					.12				T.	.28			.09	T.	.72				T.	.52		.47		3.07
Waynesville‖	Tennessee	T.	.74	.13				.27	.11					.07		.14	.13	.14	.38			.20	1.40	.10				1.26	.14	.21	.38	5.80
Virginia.																															
Big Stone Gap	Tennessee	.70	1.85					.72						.15		T.		1.35					1.30				.30	2.10		2.00		10.47
Blacksburg	Kanawha	.20	.52					.35							.05	T.	.04	.12	.20		T.	T.	.58				.15	.12		.46	.02	3.41
Burkes Garden	Tennessee	.22	1.50					.30						T.		T.	.63	.12	.05				.40				.24	1.20		.60	.20	5.49
Elk Knob	do	1.09	1.95					.72						.13		.05		.45	.60		.02		.81				.25	1.71		1.34	.04	9.16
Ivanhoe	Kanawha	T.	.66	.20				.20	.10		T.			.04	T.		.35	.20	.02		T.		.16	.48				.35	.10	.02	.32	3.20
Lebanon	Tennessee	.51	1.71					.30						.31		.20							.61				.37	1.21		.81		6.03
Max Meadows	Kanawha		.87					.37					.25			.36	.27	.33			T.		.90				.37	.52		.42		4.66
Mendota	Tennessee		2.15	.50					.40				.18	.20	.08		.40	.30	.28				.55	.30				1.15	.12		.95	7.56
Mountain Lake	Kanawha		1.30					.60							.20		.30	.40					.60				.30	1.11		.60		5.41
Radford	do		.70	.28				.30	T.									.20					.30	.42				.90	T.		1.06	4.16
Speers Ferry	Tennessee		2.54	.20				.48	.32				.10				.55	.24	.26				.60	.36				1.14	.28	.47	.78	8.32
Wytheville	Kanawha	.42	.72	T.				.19						.03		.36	.05	.18			.01		.66				.24	.53		.22		3.61

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures for April, 1912. District No. 3.*

Date.	Pennsylvania.				West Virginia.														Ohio.							
	Greenville.		Pittsburgh.		Charleston.		Elkhorn.		Elkins.		Glenville.		Huntington.§§		Morgantown.		Parkersburg.		Wheeling.§§		Canton.§§		Cincinnati.		Columbus.		Dayton.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	63	24	66	41	68	46	66	42	67	49	70	32	66	41	67	41	63	46	67	40	62	36	61	53	58	42	58	42
2....	53	29	55	30	74	55	70	52	71	30	72	52	70	50	61	40	60	34	44	42	35	35	58	34	52	32	46	30
3....	36	25	35	29	60	35	62	30	40	30	52	34	51	35	42	30	45	34	59	32	37	28	49	30	41	28	44	23
4....	57	27	59	32	68	31	65	28	62	25	69	24	68	30	60	27	66	31	68	27	62	28	69	36	63	32	66	35
5....	72	36	69	51	74	42	68	35	67	31	74	33	73	35	69	49	73	49	76	37	72	36	74	56	71	50	72	53
6....	73	45	74	56	77	47	70	42	77	43	80	31	78	51	74	56	75	58	80	45	76	49	74	54	73	52	72	55
7....	65	50	66	31	77	45	66	38	60	35	77	42	76	54	67	35	66	36	52	52	49	45	58	39	61	33	57	35
8....	43	26	44	29	56	31	53	27	47	26	58	27	55	33	49	28	54	32	57	30	48	27	58	34	54	31	57	32
9....	66	26	65	40	72	35	68	30	66	32	72	31	59	31	65	35	69	36	71	32	66	31	68	42	65	39	66	40
10....	56	30	57	38	72	48	68	42	60	35	70	44	72	34	64	48	63	46	66	49	54	36	68	52	58	47	63	50
11....	72	27	70	38	75	40	75	37	71	28	79	31	70	40	72	33	74	37	79	32	74	33	78	46	72	43	73	44
12....	72	26	77	55	84	51	79	40	80	35	87	40	76	38	.....	.....	82	48	83	42	79	45	81	53	79	54	78	56
13....	68	45	69	54	83	58	78	42	70	51	74	56	81	43	78	45	74	56	71	46	70	49	69	58	68	56	69	57
14....	65	52	67	57	79	58	79	44	71	59	77	59	75	53	73	57	76	61	74	55	73	51	81	59	77	59	76	58
15....	80	54	80	60	83	60	81	47	81	58	86	61	82	58	81	61	83	63	85	62	79	55	82	64	79	62	80	61
16....	72	43	75	53	80	58	75	53	77	50	84	52	83	63	77	59	79	57	85	54	72	48	72	57	68	54	68	53
17....	53	42	61	49	81	60	75	58	71	55	80	52	79	55	72	49	67	52	61	49	55	43	60	49	54	46	55	43
18....	58	41	58	37	80	50	74	50	62	38	68	47	78	56	67	49	61	42	61	52	50	41	49	38	53	37	49	36
19....	49	33	48	36	58	40	56	35	50	32	60	39	52	51	50	36	55	39	58	38	52	34	57	36	53	33	54	33
20....	61	28	59	38	66	44	60	37	61	30	69	35	59	39	61	35	64	43	69	36	62	34	67	48	64	44	63	46
21....	71	30	71	43	74	43	68	42	67	32	73	36	65	40	73	41	72	44	76	31	73	38	69	49	70	46	62	47
22....	70	47	68	40	76	55	72	49	72	43	77	49	74	43	72	53	74	46	74	47	71	54	64	45	67	42	61	42
23....	54	33	53	35	76	44	68	38	53	34	65	41	74	47	68	38	58	41	63	39	57	33	62	43	58	35	59	37
24....	62	35	64	44	71	40	65	34	63	33	71	31	72	40	64	40	69	42	70	38	66	39	71	51	67	46	67	44
25....	63	28	64	38	73	43	72	39	70	35	78	36	72	43	66	46	70	40	75	33	68	33	71	49	67	41	69	42
26....	63	46	64	56	75	56	73	56	65	56	76	50	71	47	67	55	71	57	65	48	67	51	64	56	62	55	61	54
27....	62	39	65	42	71	57	64	53	66	46	75	55	73	57	69	52	69	52	76	56	62	55	69	54	63	48	63	50
28....	57	26	59	36	76	45	74	50	73	33	75	39	72	47	65	35	65	43	65	36	57	30	60	49	54	40	52	44
29....	52	43	65	47	78	61	76	41	75	58	78	51	76	51	73	52	75	54	72	46	61	41	71	46	70	43	69	42
30....	58	32	53	42	76	49	65	46	58	46	70	48	56	50	72	45	60	47	55	46	55	41	55	45	51	40	52	43
Mns..	61.5	35.3	62.7	42.6	73.8	47.6	69.5	41.9	65.8	39.6	73.2	41.9	70.3	45.2	66.8a	44.1a	67.7	45.5	68.6	42.4	62.1	40.0	66.3	47.5	63.1	43.7	62.9	44.2

Date.	Ohio.				Indiana.										Philo, Ill.		Kentucky.									
	Marion.		Waverly.§§		Butlerville.		Evansville.		Indianapolis.		Kokomo.		Rockville.		Worthington.				Beattyville.§§		Bowling Green.§§		Earlington.§§		Greensburg.§§		Lexington.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	65	35	62	32	68	51	58	54	56	41	56	40	47	43	69	50	56	38	64	30	60	47	61	55	60	39	58	53
2....	55	30	43	43	58	33	58	38	41	32	44	31	44	32	57	33	50	33	71	45	65	54	52	52	68	42	66	34
3....	44	24	48	30	51	30	54	37	48	29	48	24	50	27	53	31	53	30	55	30	66	35	61	33	58	32	47	34
4....	64	31	69	27	70	36	70	45	71	38	70	33	66	37	71	36	72	36	75	25	78	35	77	39	76	31	68	35
5....	72	47	73	29	74	52	69	54	73	53	71	51	69	51	74	51	74	49	77	25	78	48	77	50	75	35	71	50
6....	77	47	77	45	74	55	66	52	73	51	73	53	65	54	74	56	73	51	76	38	71	53	73	59	71	54	71	54
7....	69	38	51	50	65	38	55	40	51	36	65	32	54	37	65	39	51	36	54	42	57	45	55	42	54	44	56	39
8....	55	27	60	27	61	28	59	40	57	34	57	31	54	29	60	31	60	29	62	25	66	32	64	34	59	31	55	33
9....	68	37	68	31	68	39	69	49	66	41	67	41	63	40	69	37	71	38	66	29	78	31	73	33	73	30	68	39
10....	62	39	67	49	73	45	69	54	66	51	67	41	67	45	73	46	71	41	71	44	78	48	76	48	74	32	69	53
11....	75	38	77	32	78	48	75	54	75	50	73	43	72	45	79	47	75	44	78	35	84	48	80	51	81	41	74	51
12....	82	50	84	43	81	52	77	58	78	58	78	52	57	53	80	61	77	53	79	43	85	50	83	50	86	44	80	56
13....	75	52	71	55	72	56	74	58	65	57	59	47	66	55	67	57	72	55	77	48	82	53	79	59	77	49	73	58
14....	78	57	81	58	78	58	77	62	76	60	75	50	71	60	78	62	76	58	77	50	81	58	82	59	80	59	77	62
15....	79	53	82	61	83	60	81	58	79	57	75	50	69	51	83	53	71	50	60	52	70	60	75	60	82	60	78	60
16....	70	49	80	54	75	51	67	56	64	50	62	42	58	47	72	50	58	42	62	47	75	51	72	53	76	49	73	56
17....	61	39	61	50	64	49	60	41	52	40	55	37	47	42	60	48	46	38	59	57	77	57	69	54	72	53	69	49
18....	49	37	50	45	58	37	46	38	40	35	46	33	49	34	48	35	43	34	40	42	46	39	47	38	45	42	49	36
19....	54	30	59	34	60	32	59	37	56	33	56	29	55	28	59	28	58	30	45	32	63	32	66	31	52	29	55	34
20....	66	37	67	37	61	39	68	51	64	48	60	43	64	46	70	48	65	45	48	36	72	45	73	40	67	30	59	46
21....	73	42	72	38	67	49	72	53	65	50	63	45	67	51	70	52	71	49	77	36	81	46	77	50	78	43	70	48
22....	72	45	72	57	66	44	63	48	61	44	63	40	51	42	67	45	62	43	75	44	68	56	62	58	70	46	65	42
23....	61	31	63	37	65	33	66	46	62	40	61	30	60	34	66	36	64	34	67	40	73	38	70	38	68	36	60	40
24....	66	44	72	36	71	45	73	54	68	46	60	45	70	46	74	43	70	43	73	36	79	43	77	44	75	36	69	47
25....	70	32	71	36	72	47	75	56	69	46	67	39	64	47	74	49	70	42	80	39	82	45	80	47	81	40	72	57
26....	70	52	66	56	67	53	69	55	61	54	64	53	63	53	64	55	70	58	70	49	82	55	71	54	70	46	66	54
27....	70	50	70	55	68	50	67	56	64	46	62	42	68	45	68	48	62	41	73	57	83	57	75	58	70	56	68	49
28....	60	36	65	44	61	48	74	56	56	46	52	38	61	46	64	50	64	47	82	42	82	52	80	54	81	47	74	49
29....	60	43	75	48	70	52	69	49	66	45	52	45	47	46	72	51	65	45	75	52	76	58	74	65	77	53	72	45
30....	56	39	57	44	56	45	56	48	55	45	55	39	55	46	56	47	57	37	61	50	58	46	56	46	57	47	55	47
Mns..	65.9	41.0	67.1	42.8	67.8	45.2	66.5	49.9	62.6	45.2	61.9	40.6	59.8	43.7	67.9	45.8	64.2	42.3	67.8	40.7	73.2	47.2	72.1	48.5	70.4	42.5	66.2	47.0

TABLE 3.—*Maximum and minimum temperatures at selected stations for April, 1912. District No. 3*—Continued.

Date.	Kentucky.						Tennessee.												Decatur, Ala.§§		Asheville, N. C.		Virginia.			
	Louisville.		Maysville.§§		Williamsburg.§§		Chattanooga.		Johnson City.§§		Knoxville.		Nashville.		Palmetto.		Sparta.		Waynesboro.						Big Stone Gap.		Wytheville.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	61	56	62	39	60	37	63	52	64	49	57	53	61	54	64	54	62	55	73	53	79	54	59	47	58	45	63	44
2	61	39	59	51	74	53	72	42	74	51	74	41	66	41	71	46	71	45	73	45	74	47	74	39	71	52	71	34
3	51	36	51	31	55	34	62	39	54	34	57	36	61	40	65	35	58	34	66	32	69	42	49	33	59	33	47	32
4	74	37	72	29	74	32	70	42	69	29	68	35	72	42	74	40	63	35	75	38	73	45	66	30	55	28	63	28
5	75	60	76	30	75	41	72	52	71	32	71	46	74	57	74	60	70	35	74	53	72	55	67	38	58	36	60	32
6	72	59	76	49	74	51	70	55	72	42	72	50	68	59	67	57	75	35	70	58	66	57	70	43	70	41	69	38
7	59	42	51	46	61	47	59	46	55	52	56	41	60	45	62	46	61	45	61	46	56	52	61	37	67	41	57	36
8	60	39	61	28	60	31	62	42	61	31	56	36	59	42	62	34	63	36	61	37	58	41	55	34	56	30	52	30
9	71	42	72	30	77	31	73	40	61	33	71	37	72	40	66	40	74	33	74	33	74	38	69	30	70	30	64	28
10	72	54	72	36	73	38	69	52	71	36	72	56	71	58	76	54	73	52	75	53	69	54	67	46	71	44	66	45
11	79	51	80	36	80	40	79	54	79	41	79	48	78	53	80	58	80	48	80	54	78	53	74	45	76	40	73	36
12	82	56	86	37	85	44	80	56	83	51	82	54	80	55	79	56	83	49	78	52	81	56	76	53	81	47	78	45
13	75	59	74	46	80	52	75	63	76	53	77	62	76	62	75	62	82	63	72	52	76	61	67	57	77	56	69	54
14	79	63	84	56	82	53	71	62	76	56	72	58	78	63	74	61	72	61	80	61	73	62	71	58	78	50	68	57
15	85	64	84	60	78	57	70	61	81	59	76	56	72	59	70	59	71	59	73	62	65	57	73	60	79	56	77	52
16	72	58	81	54	78	55	71	59	76	57	75	58	70	56	68	55	71	59	63	60	66	55	68	59	75	54	71	53
17	69	43	68	53	77	56	75	59	80	60	75	59	72	50	76	60	78	61	69	58	75	54	75	57	73	55	74	57
18	44	39	44	42	53	50	59	44	62	56	59	45	50	42	60	42	66	45	58	47	61	48	63	40	62	48	62	38
19	60	37	61	33	64	35	65	39	66	41	60	41	59	35	60	34	63	34	63	32	64	38	62	38	63	44	58	37
20	67	49	70	35	75	40	61	50	63	42	64	49	68	50	72	51	66	48	68	50	67	39	54	44	61	44	53	38
21	72	50	74	37	79	41	68	53	81	43	79	48	71	53	74	56	81	48	75	54	76	54	65	48	73	42	58	44
22	63	46	70	44	78	42	78	51	74	53	77	49	72	48	77	54	75	36	73	55	76	66	73	49	72	55	68	46
23	66	43	66	38	78	38	70	45	65	39	67	43	68	41	71	40	66	38	70	37	62	42	58	40	64	38	56	39
24	74	49	75	38	78	40	76	46	71	38	72	44	76	48	77	45	74	43	77	43	75	46	66	39	70	37	64	34
25	78	51	78	40	80	40	77	49	78	41	79	46	77	50	78	50	80	46	79	43	80	49	72	40	77	41	72	40
26	66	55	68	43	70	42	74	63	72	43	75	61	74	58	75	61	71	60	78	59	82	54	66	57	71	57	64	51
27	71	57	73	55	82	52	67	56	68	56	67	54	71	58	69	56	70	57	71	58	74	68	63	52	68	55	63	50
28	77	54	72	43	83	50	79	55	82	49	79	51	79	58	80	57	83	54	82	58	83	58	73	45	78	46	73	41
29	72	51	75	51	78	48	78	60	77	55	75	59	75	53	78	60	78	60	78	60	80	68	69	56	76	54	69	58
30	58	48	56	45	60	50	71	56	65	55	64	52	58	48	64	50	69	50	66	50	65	55	64	52	63	53	60	45
Mns.	6.88	49.6	69.7	41.2	73.4	44.0	70.5	51.4	70.9	45.9	70.2	48.9	69.6	50.6	71.3	51.1	71.6	47.5	71.8	49.8	71.6	52.3	66.3	45.5	69.1	45.1	69.4	42.0

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 4, THE LAKE REGION.

HENRY J. COX, District Editor.

GENERAL SUMMARY.

The weather during the month of April, 1912, was in decided contrast with that of the three preceding months, the temperature averaging near or slightly above the normal in practically all sections of the district, except in Vermont and eastern New York; while the temperature during the months of January, February, and March averaged, respectively, 12.6°, 3.5°, and 6.2° below the normal, and in the Lake region constituted one of the coldest three-month periods on record. At the beginning of April the season was unusually backward over the whole district, and as the weather conditions during the month were marked by no decided abnormal features, both as regards temperature and precipitation, vegetation advanced very slowly, the leaves not appearing on trees and shrubbery until near the close. Outdoor work and farming operations were correspondingly retarded. Reports from Ohio indicate that the severe weather of last winter did much damage to crops in that State, wheat and clover being badly damaged. The peach buds in the fruit belt along the south shore of Lake Erie were practically all killed, except on the islands near the shore.

Seven distinct and well-defined areas of low pressure crossed the district or portions of it during the month, giving generally ample and well-distributed precipitation, largely in the form of rain, although during the storm of the 1st–3d, heavy snows were reported from the lower Lake region and the eastern portion of the district. Snow and sleet were general over the southwestern and central Lake region during the storm of the 17th–18th, and considerable snow fell in the western Lake Superior region accompanying the eastward movement of a moderate depression across the Lakes on the 21st–22d.

Severe thunderstorms accompanied locally by high winds and hail occurred in connection with the low-pressure areas of the 6th–7th, 14th–15th, and the 25th–26th, and a storm of tornadic type was reported from northern Illinois on the 6th. The percentage of possible sunshine over the district was generally in excess of the normal as was also the wind movement.

The following table shows mean values of the more important weather conditions of the month:

Portions of States lying within District No. 4.	Mean.				Greatest 24-hour precipitation.	Mean snowfall, inches.	Number of days.				
	Temperature.	Departure from normal.	Precipitation.	Departure from normal.			Precipitation.	Clear.	Partly cloudy.	Cloudy.	Prevailing wind direction.
Minnesota	40.3	+ 1.0	1.87	−0.19	1.44	2.3	6	14	9	7	ne.
Wisconsin	44.1	+ 1.8	1.63	−0.89	1.20	1.1	7	14	9	7	sw.
Illinois	48.8	+ 2.9	2.55	−0.33	1.05	0.1	9	14	7	9	sw.
Indiana	49.9	+ 1.5	3.02	−0.45	1.78	0.6	10	14	6	10	sw.
Upper Michigan	38.3	+ 0.3	2.18	+0.08	1.82	2.7	9	13	8	9	nw.
Lower Michigan	44.8	+ 0.9	2.18	−0.15	1.61	1.0	8	12	9	9	sw.
Ohio	49.6	+ 1.8	3.72	+0.90	1.70	3.7	11	12	7	11	sw.
Pennsylvania	45.5	+ 0.8	4.22	+1.82	0.99	6.1	13	7	13	10	w.
New York	42.0	− 0.7	3.22	+0.57	1.75	8.8	13	10	9	11	nw.
Vermont	41.1	− 1.1	2.94	+1.01	1.27	8.4	13	10	9	11	s.

TEMPERATURE.

In general only slight departures from the normal monthly temperature were experienced in any section of the district, and the extremes of temperature were well within the limits of former years. The greatest average monthly departures were those above the normal and occurred along the western shore of Lake Michigan, Milwaukee, Wis., reporting an average daily excess of temperature of 4.0°. The greatest monthly deficiencies occurred over northern New York, Lowville reporting a departure of −4.2°. Although the average temperature for the month was in most cases close to the normal, the changes were frequent, and the month was marked by alternating periods of warm and cold weather. The first three days of the month were cold, except over the extreme western Lake Superior region, and during this period the lowest temperatures of the month generally occurred. At North Lake, N. Y., a reading of −8° was reported on the 4th. From the 5th to the 16th, temperatures were generally above the normal, except from the 8th to the 11th over eastern sections, the warmest days being the 5th, 6th, and the 15th, when departures of from +20° to +30° occurred over all portions of the district. Maximum temperatures exceeded 80° over the more southern portions of the district during this period. Temperatures below the normal occurred from the 17th to the 20th, and this period was followed by several days of seasonable weather, culminating on the 26th with readings considerably above the normal, which was in turn followed by a marked change to much cooler weather, continuing until after the close of the month. During the latter half of the month freezing temperatures were recorded at different times over practically the whole district, but no material damage was done, however, as vegetation was not sufficiently advanced to admit of injury.

PRECIPITATION.

The precipitation for the month followed closely the temperature conditions in that the departures from the normal were small. Over the greater portion of the district the monthly amounts were slightly below the normal, and in southern and central Wisconsin the deficiencies amounted in some instances to over 1.50 inches. The greatest excesses occurred in portions of Ohio, Pennsylvania, and in western Vermont. In Ohio there was a wide difference in the monthly amounts at the several stations, and in general they were below the normal in the Maumee Valley and considerably above in the middle and eastern counties. In New York the heaviest precipitation occurred near Lake Erie, and in the central lake region, with a maximum of 5.02 inches at Skaneateles. Heavy rains occurred on the 28th–29th over the central and southern portions of the district, and in Indiana on the 29th 24-hour amounts ranging from 1 to 2 inches were recorded at most stations, except those in the northeastern counties.

Snow.—The total monthly snowfall was below the normal in both the Michigan Peninsulas, in Wisconsin, Illinois, and Indiana. Over the western Lake Superior region the monthly amounts were slightly in excess of the normal, while in New York State the snowfall was comparatively light near Lakes Erie and Ontario, but unusually heavy elsewhere, the average, 8 8 inches, being the heaviest since 1904. Along Lake Champlain the snowfall exceeded 12 inches, while in central New York the fall was the heaviest for April in the past 16 years. Most of this snow fell during the storm of the 2d–3d, Harkness, Dannemora, Angelica, and Raquette Lake reporting 12, 11, 10, and 10 inches, respectively. A heavy snowstorm also occurred over the Adirondacks on the 8th–9th. Other unusually heavy snowfalls for the season occurred as follows: 6 7 inches at Cleveland, Ohio, on the 2d, which is the heaviest 24-hour April snowfall on record; 6 5 inches at Milwaukee, Wis , on the 17th–18th; and 6 4 inches at Duluth, Minn , on the 21st. However, in all these cases, the snow melted rapidly, and it had practically disappeared by the evening of the following day. At the end of the month traces of snow were reported on the ground in the wooded sections near Duluth, Minn , but in nearly all other portions of the district the winter's accumulation had, as a rule, disappeared by the end of the first decade.

SEVERE STORMS AND HIGH WINDS.

The low pressure area of the 6th–7th caused high winds generally over the Great Lake region, and nearly all stations reported maximum wind velocities of 40 miles or over. Niles Center and Wilmette, Ill., suburban towns just north of Chicago, were visited by a destructive wind storm on the 6th which caused reported damage to the extent of $50,000 and injured 18 people. Severe thunderstorms occurred in Ohio on the afternoon and evening of the 14th, in connection with a slow-moving area of low pressure which was then central over southern Minnesota. While but little damage was done by lightning, there was considerable loss occasioned by hail which fell during the progress of the storm, and at a number of widely scattered stations hailstones were reported to have been unusually large. Near Findlay, some of the largest were said to have measured 1½ inches in diameter, while at Fremont some were found measuring 2¼ inches. The greatest damage was done to windows and greenhouses. The only other severe disturbance of the month was that occurring on the 25th–26th, when the following high maximum wind velocities were reported: Duluth, Minn , 70 miles, breaking all previous April records, but doing only minor damage in the city; Cleveland, Ohio, 58 miles; Toledo, Ohio, 57 miles; Green Bay, Wis , 55 miles; Chicago, Ill., 51 miles; Detroit and Sault Ste. Marie, Mich., and Syracuse, N. Y., 50 miles.

NAVIGATION AND ICE CONDITIONS.

At the beginning of the month more ice was reported in all the lakes and the fields were more extensive in comparison than at the same time last year, and the outlook for an early opening of navigation was unfavorable. At Duluth, Minn , the harbor ice averaged 36 inches in thickness, and in the lake the fields extended solid about 20 miles out and averaged in thickness about 28 inches. However, under the influence of the warm weather during the first decade of the month which was practically the first and most pronounced warm period of the year thus far, the ice in all the lakes softened rapidly. At the extreme south end of Lake Michigan the ice began to break up on the 3d, and on the 8th no ice was reported along either the east or the west shores of the lake from the Manitous southward, except some fields off Kenosha, Wis.

Continued seasonal temperature conditions during the second decade of the month caused a practical disappearance of the ice over the western portion of Lake Superior and local navigation was opened at Duluth on the 16th, about 10 days later than usual. Over the eastern portion of the lake, however, extensive fields were still reported, but broken and moving with the wind. No ice was reported in Lake Michigan except over the extreme north portion, and in Green Bay where it was rapdidly disappearing. On Lakes Huron, Erie, and Ontario the ice fields were confined to the eastern portions of the respective lakes and were rapidly breaking up.

The display of storm warnings for the season of 1912 was resumed on the Great Lakes April 25, about 10 days later than the average date, and navigation between Lakes Superior and Huron was opened on the 24th. The ice in the Straits of Mackinac offered no obstruction to navigation as early as the 14th, but the through passage of the first boat did not occur until the 17th. Between Lakes Huron and Erie navigation was possible after the middle of the month, but no decided activity was shown. As general navigation between the Upper Lakes depends entirely upon the time when the Straits of Mackinac are free from ice and the locks at Sault Ste. Marie can be opened, the following table, showing these dates for the last 20 years, will undoubtedly be of interest.

	Dates of opening of navigation at—			Dates of opening of navigation at—	
	Straits of Mackinac.	Sault Ste. Marie.		Straits of Mackinac.	Sault Ste. Marie.
1893	May 7	Apr. 29	1903	Mar. 23	Apr. 9
1894	Apr. 20	Apr. 17	1904	May 1	May 5
1895	Apr. 29	Apr. 23	1905	Apr. 18	Apr. 14
1896	Apr. 22	Apr. 18	1906	Apr. 9	Apr. 15
1897	Apr. 25	Apr. 21	1907	Apr. 4	Apr. 23
1898	Apr. 16	Apr. 13	1908	Apr. 12	Apr. 24
1899	Apr. 26	Apr. 29	1909	Apr. 15	Apr. 20
1900	Apr. 8	Apr. 22	1910	Apr. 1	Apr. 11
1901	Apr. 14	Apr. 27	1911	Apr. 12	Apr. 22
1902	Mar. 26	Apr. 4	1912	Apr. 17	Apr. 24

FLOODS AND RIVER CONDITIONS.

One of the most severe floods in recent years occurred at Barre and Montpelier, Vt., on April 7th–8th. At the beginning of the month, from 2 to 3 feet of snow was reported on the hills and mountains about 4 to 8 miles distant, and under the influence of strong, warm, southerly winds on the 5th, 6th and 7th, this snow melted rapidly and caused an overflow of the rivers, filling the streets and cellars in the lower and business sections of the two towns. The absence of ice and driftwood resulted in the saving of many bridges. The damage at Montpelier was estimated at from $25,000 to $30,000 and at Barre about $10,000.

The rapid melting of snow during the latter part of March and the early part of April caused a decided rise in the rivers of the Lower Michigan Peninsula and floods occurred at many points. A complete report of the floods in the Grand and Saginaw Rivers is published in a separate article.

APRIL, 1912, LAKE LEVELS.

The following data are from the report of the United States Lake Survey office.

Lakes.	Above tide water, New York.
	Feet.
Superior	601.46
Michigan-Huron	579.44
Erie	572.25
Ontario	246.32

Lake Superior is 0.07 foot higher than last month, 0.92 foot higher than a year ago, 0.31 foot below the average stage of April for the last 10 years, 1.23 feet below the high stage of April, 1860, and 0.92 foot above the low stage of April, 1911. It will probably rise 0.3 foot during May.

Lakes Michigan and Huron are 0.17 foot higher than last month, 0.03 foot higher than a year ago, 1.00 foot below the average stage of April for the last 10 years, 3.79 feet below the high stage of April, 1886, and 0.22 foot above the low stage of April, 1896. They will probably rise 0.3 foot during May.

Lake Erie is 1.06 feet higher than last month, 0.64 foot higher than a year ago, 0.09 foot lower than the average stage of April for the last 10 years, 1.93 feet below the high stage of April, 1862, and 0.99 foot above the low stage of April, 1895. It will probably rise 0.4 foot during May.

Lake Ontario is 1.22 feet higher than last month, 0.88 foot higher than a year ago, 0.05 foot lower than the average stage of April for the last 10 years, 2.11 feet below the high stage of April, 1886, and 1.48 feet above the low stage of April, 1872. It will probably rise 0.3 foot during May.

FLOODS IN MICHIGAN, SPRING OF 1912.

By C. F. SCHNEIDER, Section Director.

The high water in the Grand River in the spring of 1912 was caused entirely by the melting and run-off of the winter's accumulation of snow and of ice formed in the snow by frozen rain. During the entire period of the melting and run-off, there was less than one-third of an inch of rain on an average throughout the watershed and the melting was caused entirely by the advance of the season.

During January, February, and the first two decades of March, the weather was very severe and the entire period was devoid of any decided thaw, such as usually occurs during January or February. The result was that at the end of the second decade of March, all of the snowfall of the winter was stored on the ground, which was frosted to a depth of several feet.

About the middle of February there seemed to be an indication that there might be a general thaw which would release some of the water held in storage and a very careful and extensive survey of the amount of snow and ice on the ground and its water content was made. Postal cards asking for the information were sent to every post office in the watershed and the returns charted, showing that there was an average of from 11 to 15 inches of snow on the ground, which would yield about 3½ inches of water if the thaw were decided enough. The weather, however, remained too cold to melt any of the snow sufficiently to allow it to run into the river or its tributaries.

On March 7 another survey of the amount of water stored on the ground was made in a similar manner, and it was found that the depth had increased somewhat over the upper stretches of the river. At this time warning was issued to the public, saying that the season had advanced so far without any run-off at all that unless a very slow thaw immediately set in, at least 15 feet of water could be expected at Grand Rapids by the close of the month or soon thereafter. Merchants, factories, and other concerns were advised to take precautionary steps to protect themselves from a water stage that would almost surely reach 15 feet.

The mean temperature rose above freezing on the 17th for a few days, but fell below that point on the 20th and continued so until the 26th. The day temperatures, however, softened the snow so that on the 26th of March, when the mean temperature rose above the freezing point permanently, the congestion of water began in earnest.

The first flood warning was issued March 22, and warnings were sent out from day to day thereafter until the flood subsided. The river rose steadily during the last few days of March, reaching flood stages at Grand Rapids on April 2 and the highest point, 15.8, on April 7.

In the meantime, one ice gorge after another formed both above and below the city of Portland and caused the citizens of that place much discomfort and anxiety, but the Portland ice gorges were the only serious ones which occurred throughout the entire river stand. The river fell below flood stage at Eaton Rapids on April 2; at Lansing, April 9; at Grand Ledge, April 10; Iona, April 9; Lowell, April 11; and at Grand Rapids, April 13. At the close of the month, the river stages at all places were above normal.

The flood in the Saginaw River is interesting in that it was caused entirely by the run-off of the winter's accumulation of snow.

On March 12, after making a careful survey of the snow on the ground and owing to the lateness of the season, a statement was issued from the Grand Rapids office of the Weather Bureau to the citizens of the Saginaw Valley, saying that there was more than a probability that high water would prevail during the last of March or the early part of April; if there was no heavy rain, the water would rise only to a moderate height above flood stages, but that with rain more severe conditions might be expected. During the flood there was some ice jamming, but aside from alarming the people and causing slight temporary rises, no appreciable effect was traceable to jams.

The warm weather which set in during the last decade of March caused rapid rises in most of the tributaries of the Saginaw River and the waters then congested in that short stream.

Flood warnings were issued to all places in the lower part of the Saginaw watershed on March 22 and flood stages were reached at Midland and Saginaw by the close of the month.

The greatest damage was done at Midland and Saginaw. At Midland the river rose 4.5 feet above flood stage on April 1 and then fell slowly until the evening of the 4th, when two days of very warm weather occurred that searched out all of the remaining snow in the woods and gullies, again raising the river until the evening of April 6, when it was 5.5 feet above flood stage. At this time, a large section of the city of Midland was under water and many of the residents in one part of the town were driven from their homes.

At Saginaw the river reached a stage of 21.8 feet, or 2.7 feet above flood stage on the morning of April 3 and then remained nearly stationary until the 5th, when a steady rise set in that finally reached its highest point of 23.3 feet on the morning of April 8. The river did not begin to fall until during the day of April 9, after which it receded slowly and fell below flood stage by the morning of April 17.

Altogether, the river was above flood stage at Midland 11 days and at Saginaw nearly 16 days. The damage at Saginaw, on account of its greater population, was considerable. Many of the large factories along the river were shut down, while from 2 to 4 feet of water stood in the basements of a large number of the business houses in the retail district and the heart of the city.

The flood would have been much more severe had moderately heavy rains occurred while the water was rising or had a sudden downpour occurred while the flood was at its height.

The warnings of the Weather Bureau at Saginaw were an entirely new feature to the people of that city and much praise was given by citizens and by the press for the timely and accurate warnings, and for the general information which was published in the newspapers from day to day regarding the condition of all the tributaries above. The Weather Bureau and the public are greatly indebted to the Saginaw Courier-Herald, a morning paper, and the Saginaw Daily News, an evening paper, for publishing all warnings and gage readings without expense to the United States.

TABLE 1.—*Climatological data for April, 1912. District No. 4, Lake Region.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Minnesota.																			
Cloquet	Carlton	800	1	40.5	.....	76	5	15	1	42	2.29	.....	0.77	3.0	7	7	16	7	e.	Walter McDonald.
Duluth	St. Louis	1,133	41	38.7	+ 0.3	74	5	21	1	34	2.58	+ 0.44	1.44	6.4	7	11	11	8	ne.	U. S. Weather Bureau.
Floodwood	do	1,257	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. H. Schussler.
Stephens Mine	do	1,500	5	41.0	.....	77	5	16	1	56	1.50	.....	1.20	T.	3	19	7	4	n.	Oliver Iron Mining Co.
Two Harbors	Lake	614	18	39.6	+ 0.6	70	5	17	1	37	1.46	− 0.70	0.85	2.0	7	16	8	6	ne.	G. W. Watts.
Virginia	St. Louis	1,434	18	41.6	+ 2.0	77	5	15	1	47	1.53	− 0.32	1.20	T.	4	15	6	9	ne.	Oliver Iron Mining Co.
Wisconsin.																			
Appleton	Outagamie	795	11	45.8	+ 2.8	70	4†	24	3	36	2.13	− 0.37	1.16	T.	9	17	7	6	e.	Wm. O. Thiede.
Ashland	Ashland	647	21	40.0	+ 0.4	78	5	16	8	36	2.64	+ 0.53	0.65	T.	7	11	10	9	ne.	Sam Wheeler.
Bayfield	Bayfield	635	3	40.0	.....	67	4	12	7	45	2.46	.....	1.02	3.5	7	13[a]	3[a]	13[a]	nw.	Fred Kern.
Cecil	Shawano	804	14	44.9	+ 2.1	72	4	22	1	35	1.61	− 1.16	0.70	0	6	16	11	3	sw.	Louis W. Schmidt.
Crandon	Forest	1,060	17	41.6	+ 0.6	69	5	18	1†	36	1.70	− 0.39	0.85	0	6	5	13	12	nw.	Frank Shoemaker.
Florence	Florence	1,293	21	40.5	+ 1.6	72	5	16	1	39	2.62	+ 0.18	1.20	0	9	17	2	11	n.	Fred S. Evans.
Fond du Lac	Fond du Lac	800	26	47.6	+ 3.1	73	14	22	19	41	0.94	− 1.30	0.32	T.	7	23	5	2	ne.	Edward A. Seeley.
Grand River Locks	Marquette	770	16	48.2	.....	74	5†	22	18	41	1.33	− 1.27	0.55	T.	8	19	3	8	sw.	Jerry Parkinson.
Green Bay	Brown	617	26	43.5	+ 2.8	67	6	23	3	31	2.06	− 0.38	0.76	T.	10	6	12	12	ne.	U. S. Weather Bureau.
High Falls	Marinette	810	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	No. Hydro-Elec. Power Co
Iron River	Bayfield	1,096	3	42.6	.....	80	5	17	18†	55	1.86	.....	0.65	4.0	9	20	2	8	s.	Winfield E. Tripp.
Kewaunee	Kewaunee	590	3	41.5	.....	68	4	20	2	35	1.83	.....	0.59	0	6	11	10	9	s.	Eugene V. Kimball.
Manitowoc	Manitowoc	616	61	43.6	+ 1.4	69	4†	24	3	35	0.98	− 1.51	0.45	T.	6	5	14	11	s.	Johanna Lups.
Menasha	Winnebago	764	15	.....	.....	.....	.....	.....	.....	.....	1.74	− 0.12	0.76	0	5	22	3	5	sw.	Geo. T. Allanson.
Menominee Falls	Waukesha	842	3	45.6	.....	70	14	23	19	37	1.69	.....	0.64	2.8	9	16	10	4	sw.	Arthur H. Christman.
Milwaukee	Milwaukee	681	41	45.8	+ 4.0	73	14	29	18	34	1.72	− 0.98	0.68	6.6	11	11	12	7	sw.	U. S. Weather Bureau.
New London	Outagamie	762	16	46.0	+ 1.7	72	4†	23	3	37	1.35	− 1.45	0.40	0	6	8	11	11	ne.	August H. Pape.
Oconto	Oconto	590	21	43.0[a]	− 0.1	70[a]	5	21[a]	3	36[a]	1.40	− 1.19	0.41	0	5	12[a]	13[a]	4[a]	ne.	Wm. K. Smith.
Oshkosh	Winnebago	744	23	46.2	+ 1.3	73	5	21	3	40	0.61	− 2.00	0.30	0	5	19	11	0	sw.	Evan Vincent.
Pine River	Waushara	900	17	47.4[a]	+ 2.9	73[c]	5	25[c]	19†	39[c]	0.96	− 1.59	0.45	0	6	11[c]	7[c]	9[c]	sw.	Geo. H. Carpenter.
Plum Island	Door	588	4	39.8	.....	62	26	16	1†	33	1.74	.....	0.44	0	9	13	12	5	s.	Geo. C. Robinson.
Plymouth	Sheboygan	843	2	45.0	.....	69	6	23	3	35	0.83	.....	0.30	1.0	7	13	10	7	sw.	Paul O. Feldrappe.
Port Washington	Ozaukee	713	19	44.6	+ 1.5	71	5†	26	2	35	1.59	− 1.39	0.40	4.0	7	12	10	8	ne.	Richard C. Kann.
Racine	Racine	633	15	46.6	+ 1.9	74	14	23	19	39	2.18	− 0.32	0.72	6.2	8	13	8	9	sw.	Daniel Davis.
Ripon	Fond du Lac	935	2	46.6	.....	72	14	25	3	39	0.98	.....	0.50	0	6	15	6	9	sw.	Ripon College.
Sheboygan	Sheboygan	831	13	44.5	+ 1.8	76	4	25	3	41	1.08	− 1.27	0.42	1.0	7	11	13	6	se.	Louis C. Meyer.
Sturgeon Bay	Door	600	13	41.2	+ 1.8	67	4†	15	3	35	2.31	.....	1.07	0	7	10	17	3	ne.	Adam N. Dier.
Superior	Douglas	671	3	37.8	.....	76	5	20	1	44	2.34	.....	1.09	4.1	8	14	9	7	ne.	Edward B. Banks.
Waupaca	Waupaca	857	17	45.6[a]	+ 1.5	76[b]	5	18	3	46[b]	1.76	− 0.90	0.72	0	8	10	8	12	sw.	James H. Flagg.
Illinois.																			
Chicago	Cook	824	42	48.8	+ 2.9	75	14	31	2	44	2.55	− 0.33	1.05	0.1	9	14	7	9	sw.	U. S. Weather Bureau.
Evanston	do	601	....	49.8	.....	77	14	27	3	36	3.14	.....	0.66	T.	10	15	1	14	.....	City of Evanston.
Indiana.																			
Auburn	Dekalb	874	16	48.0[c]	+ 1.5	79[c]	12	23	3	40	2.14	− 0.39	0.55	T.	9	12	0	18	w.	Mrs. Josie B. Kuhlman.
Berne	Adams	849	3	51.1	.....	80	12	22	3	35	4.15	.....	0.90	5.0	14	15	7	8	sw.	Henry M. Reusser.
Elkhart	Elkhart	801	10	52.5	.....	75	12†	25	3	39	3.71	.....	1.42	0	9	18	2	10	sw.	Dr. Miles Medical Co.
Fort Wayne	Allen	856	16	49.6	+ 0.3	78	12	25	3	33	2.44	− 0.50	0.49	T.	12	13	8	9	sw.	U. S. Weather Bureau.
Hammond	Lake	598	21	50.1	+ 2.6	77	14	25	3†	36	2.38	− 0.45	0.90	0	8	8	11	11	.....	Carson W. Whitney.
Howe	Lagrange	886	7	49.9	.....	81	12	24	3	40	3.84	.....	1.78	0	7	19	0	11	.....	James E. Zook.
Notre Dame	St. Joseph	712	1	48.3	.....	74	14	24	3	30	2.68	.....	0.96	T.	12	12	10	8	sw.	U. S. Weather Bureau.
Whiting	Lake	606	3	49.6	.....	75	14	27	3	34	2.83	.....	1.24	T.	11	14	8	8	sw.	D. H. Boyd.
Michigan, Upper Peninsula.																			
Baraga	Baraga	623	10	.....	.....	.....	.....	7	14	.....	.....	.....	.....	.....	.....	15	0	15	w.	Duluth, S. S. & Atl. Ry.
Bergland	Ontonagon	1,300	2	39.8	.....	73	6	− 1	1	48	1.64	.....	0.43	.....	7	14	8	8	w.	Frank McMonigal.
Blaney	Schoolcraft		4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Calumet	Houghton	1,246	24	36.2	− 1.1	64	5	15	1	39	3.15	+ 1.00	0.55	8.0	11	17	5	8	e.	E. S. Grierson.
Chatham	Alger	875	11	35.4	− 0.7	62	5	4	1†	38	2.40	+ 0.42	0.48	2.9	14	12	9	9	nw.	U. P. Experiment Station.
Deer Park	Luce	610	11	36.1	+ 0.6	61	20†	5	1	40	1.30	− 0.21	0.70	T.	3	16	3	11	s.	Mrs. Sarah E. McGaw.
Detour	Chippewa	585	11	36.2[f]	− 1.6	65[f]	13	5[f]	2	32[f]	.....	.....	.....	.....	.....	15[f]	4[f]	5[f]	nw.	Linton Melvin.
Eagle Harbor	Keweenaw	622	13	36.4	− 1.0	64	6	11	8	30	1.79	− 0.36	0.45	0.8	7	11	7	12	e.	John Nolen.
Escanaba	Delta	612	39	37.2	0	59	26	14	1	23	1.91	− 0.16	0.85	T.	9	7	14	9	s	U. S. Weather Bureau.
Ewen	Ontonagon	1,147	11	40.9	+ 1.7	72	5	12	1	41	1.26	− 0.50	0.62	8.5	7	13	0	17	sw.	W. B. Hatfield.
Grand Marais	Alger	610	11	37.5[b]	+ 1.1	58[b]	25	18[b]	8	29[b]	2.12	+ 0.13	0.70	T.	12	17[b]	4[b]	7[b]	n.	Mrs. Lena Truedell.
Green	Ontonagon	622	1	.....	.....	72	5	.....	.....	.....	0.19	.....	0.19	0	1	17	5	8	.....	T. A. Green.
Houghton	Houghton	668	11	36.8	0	67	5	17	1	34	2.49	+ 0.46	0.70	8.6	10	13	5	12	e.	U. S. Weather Bureau.
Humboldt	Marquette	1,536	15	38.2[b]	+ 1.9	72[b]	6	3[b]	1	42[b]	.....	.....	.....	3.0	.....	17[b]	1[b]	10[b]	w.	Duluth, S. S. & Atl. Ry.
Iron Mountain	Dickinson	1,111	11	43.0	+ 2.0	74	5	17	1	37	2.73	− 0.22	1.52	T.	7	15	10	5	nw.	Chapin Mining Co.
Iron River	Iron	1,504	15	41.9	+ 3.3	73	5	15	2	40	3.95	+ 0.41	0.85	T.	9	15	9	6	nw.	Victor D. Laing.
Ironwood	Gogebic	1,520	9	42.0	.....	75	5	17	1	40	3.89	.....	1.00	7.0	10	18	7	5	n.	J. V. Brennan.
Ishpeming	Marquette	1,536	12	39.2	+ 0.4	72	5	12	13	31	2.51	+ 0.27	0.62	2.6	11	7	17	6	w.	Cleveland Cliffs Iron Co.
Isle Royale	Keweenaw	610	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Malone.
Mackinac Island	Mackinac	831	11	38.4	− 1.0	67	6	5	1	36	3.07	+ 0.78	0.93	2.5	7	3	9	18	n.	M. I. State Park Com.
Maple Ridge	Delta		6	38.1	.....	68	5	5	1	43	2.55	.....	0.65	0	6	15	3	12	s.	Herman Johnson.
Marquette	Marquette	734	41	38.1	+ 0.6	74	5	16	1	38	3.01	+ 1.02	1.27	4.4	12	6	14	10	nw.	U. S. Weather Bureau.
Menominee	Menominee	581	13	41.1	+ 1.4	65	5	14	1	31	1.78	− 0.11	0.51	0	5	19	2	9	ne.	Chicago & Northwestern Ry.
Munising	Alger	631	15	37.3	+ 1.8	65	5	9	1	39	2.09	+ 0.35	0.53	2.5	11	12	12	6	nw.	Albert Oas.
Newberry	Luce	773	10	37.1	− 1.9	61	25	6	1	33	2.06	+ 1.01	0.59	1.7	11	11	12	7	s.	John Brown.
Powers	Menominee	868	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Chicago & Northwestern Ry.
St. Ignace	Mackinac	593	22	37.8	− 0.6	63	26	8	2	42	0.18	− 2.01	0.10	1.0	3	14	8	8	e.	Duluth, S. S. & Atl. Ry.
Sault Ste. Marie	Chippewa	614	24	35.9	+ 0.2	62	25	10	1	37	2.30	+ 0.23	0.89	0.7	12	11	8	11	nw.	U. S. Weather Bureau.
Seney	Schoolcraft	730	0	38.0	.....	70	15	5	2	44	2.33	.....	0.78	1.0	10	16	10	4	nw.	Western Land Securities Co.
Thomaston	Gogebic	1,347	15	40.6	+ 2.7	74	5	12	1	43	0.68	− 0.99	0.30	5.0	5	6	17	7	n.	Duluth, S. S. & Atl. Ry.
Victoria	Ontonagon	1,263	2	40.7	.....	78	4	16	1	44	2.00	.....	0.55	6.0	10	19	3	8	nw.	R. S. Schultz, jr.
Watersmeet	Gogebic		3	39.8	.....	71	5	10	1	43	3.33	.....	1.02	5.8	14	8	10	12	sw.	B. N. Grant.
Whitefish Point	Chippewa	610	12	33.2	− 1.7	53	20	6	1†	31	2.07	+ 0.17	0.45	0.8	10	17	2	11	nw.	Robert Carlson.
Michigan, Lower Peninsula.																			
Adrian	Lenawee	770	34	48.6	+ 2.1	76	14†	24	3	38	3.45	+ 0.81	0.88	T.	8	8	13	9	nw.	H. E. Hubbard.
Allegan	Allegan	698	21	47.7	+ 1.1	76	11	21[a]	3	35	1.52	− 1.11	0.41	0.2	7	4	17	9	w.	Pere Marquette R. R.

TABLE 1.—*Climatological data for April, 1912. District No. 4*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Michigan, Lower Peninsula—Continued.																				
Alma	Gratiot	750	25	45.4	+ 1.1	75	6	19	3	35	1.93	− 0.46	0.48	0.1	9	8	10	12	nw.	P. M. Smith.
Alpena	Alpena	609	39	39.4	+ 1.4	69	15	15	3	32	2.29	+ 0.09	1.04	2.3	11	5	18	7	nw.	U. S. Weather Bureau.
Ann Arbor	Washtenaw	930	32	46.7	+ 1.3	74	15	22	3	37	3.96	+ 1.58	1.00	0	10	14	4	12	w.	University of Michigan.
Arbela	Tuscola	728	16	45.4	+ 0.8	73	26	20	3	37	3.04	+ 0.33	0.76	T.	9	1	11	18	ne.	Wm. Atkin.
Battle Creek	Calhoun	822	28	49.0	+ 1.5	73	6†	23	3	39	3.01	+ 0.85	0.66	T.	7	15	4	11	sw.	Elmer E. Sager.
Bay City	Bay	593	16	44.0	+ 0.4	74	5	19	3	39	1.30	− 1.42	1.00	0	3	.....	.....	.....	ne.	Pere Marquette R. R.
Benzonia	Benzie	832	15	42.2	+ 0.2	68	25	12	3	34	1.13	− 1.80	0.35	2.0	7	6	23	1	sw.	Wallace Nutting.
Berlin	St. Clair	.....	23	44.5[a]	+ 0.5	72[a]	15	19[a]	3	36[a]	2.85	+ 0.51	1.08	0.3	10	3[a]	16[a]	10[a]	nw.	R. O. Gould.
Big Rapids	Mecosta	906	16	45.0	+ 1.4	69	6†	17	3	39	2.92	− 0.16	0.77	.....	9	11	13	6	s.	Supt. waterworks.
Bloomingdale	Van Buren	.....	8	48.4	.....	77	6	21	3	36	1.70	.....	0.42	T.	6	14	4	12	sw.	John M. Haven.
Cadillac	Wexford	1,293	3	42.2	.....	68	15	15	3	32	1.31	.....	0.40	4.5	6	12	13	5	n.	Cadillac Water & Light Co.
Cassopolis	Cass	903	11	46.8	+ 1.5	74	11	26	3†	34	.....	.....	.....	0	.....	18	0	12	e.	Michigan Central R. R.
Charlevoix	Charlevoix	610	34	42.4[b]	+ 1.7	65[c]	15†	3	1	34[c]	1.14	− 0.58	0.86	2.0	3	11	15	4	nw.	Pere Marquette R. R.
Charlotte	Eaton	.....	8	46.0	.....	72	6	21	3	37	1.64	.....	0.88	0	7	21	1	8	sw.	City of Charlotte.
Cheboygan	Cheboygan	611	22	39.6	− 0.6	70	25	9	1	38	0.85	− 1.20	0.50	2.0	3	11	12	7	sw.	E. A. Bouchard.
Clinton	Lenawee	830	22	48.6	+ 2.0	76	15	28	8†	42	2.91	+ 0.46	0.80	0.5	8	15	9	6	sw.	David Woodward.
Coldwater	Branch	984	15	49.5[c]	+ 3.0	75	26	23[f]	3	37[f]	2.76	+ 0.05	0.92	T.	10	16	2	12	nw.	Lake Shore & Mich. So. R. R.
Concord	Jackson	.....	7	47.6	.....	75	11	22	3	42	1.79	− 1.11	0.65	0	6	13	11	6	sw.	W. N. Armstrong.
Croton	Newaygo	685	4	45.4	.....	68	15†	15	3	36	3.05	.....	1.30	2.0	5	9	17	4	sw.	Gr. R. Musk. Power Co.
Detroit	Wayne	730	41	46.2	+ 0.7	75	15	20	3	33	2.17	− 0.16	0.69	T.	11	11	9	10	nw.	U. S. Weather Bureau.
Durand	Shiawassee	792	4	43.4	.....	70	27[g]	18	7	38	.....	.....	.....	.....	.....	6	9	15	.....	H. J. Tobin.
East Tawas	Iosco	590	15	40.0	− 1.3	64	15	17	1†	29	1.24	− 1.05	0.55	.....	6	13	12	5	w.	Detroit & Mackinaw Ry.
Eloise	Wayne	640	15	47.7	+ 1.4	73	6†	24	3	38	3.22	+ 1.13	1.05	T.	11	15	6	9	w.	John Gilmore.
Flint	Genessee	730	23	44.6	+ 0.2	73	6†	21	3	38	2.68	+ 0.44	0.90	0	9	10	7	13	w.	William L. Fisher.
Frankfort	Benzie	589	8	40.7	.....	60	22†	20	1	30	1.30	.....	0.60	.....	5	15	0	15	n.	Geo. Morency.
Ganges	Allegan	665	3	46.1	.....	72	6	23	3	38	3.29	+ 1.05	1.20	2.0	9	23	2	5	sw.	H. H. Hutchins.
Gaylord	Otsego	1,367	12	38.7	− 1.6	65	6†	2	1	48	1.81	+ 0.63	0.73	1.0	6	5	5	20	sw.	Michigan Central R. R.
Gladwin	Gladwin	794	16	44.4	0	73	6	15	3	44	2.35	+ 0.34	1.50	2.0	3	23	4	3	nw.	Geo. R. Smith.
Grand Haven	Ottawa	628	31	43.8	− 0.2	68	14	23	3	33	2.90	+ 0.46	1.34	1.6	13	15	7	8	s.	U. S. Weather Bureau.
Grand Rapids	Kent	707	23	46.8	+ 0.6	74	6	23	3	32	2.46	+ 0.01	0.97	3.0	10	11	5	14	w.	Do.
Grape	Monroe	625	22	47.9	+ 0.9	77[a]	15	25	3	36[a]	2.33	− 0.14	0.77	T.	12	13	7	10	w.	Joseph W. Morris.
Grass Lake	Jackson	989	6	46.2	.....	86	7	23	3	57	1.64	.....	0.65	T.	8	18	1	11	sw.	Menzo Conklin.
Grayling	Crawford	1,147	22	41.8	+ 0.2	69	6	10	2	40	1.35	− 0.75	0.28	2.0	10	15	7	8	w.	S. N. Insley.
Harbor Beach	Huron	635	24	42.8	+ 1.8	74	15	22	2	35	1.30	− 0.65	0.90	2.0	4	16	8	6	n.	Pere Marquette R. R.
Harrison	Clare	1,159	19	44.8	+ 2.3	70	6†	14	3	36	1.36	− 1.00	0.30	3.0	6	12	6	12	nw.	Do.
Harrisville	Alcona	616	28	39.3	+ 0.2	69	15†	15	1	34	2.07	− 0.70	0.73	2.1	12	8	9	13	nw.	D. W. Mitchell.
Hart	Oceana	698	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Pere Marquette R. R.
Hayes	Huron	620	22	43.4	0	71	26	14	7	51	1.70	− 0.49	0.73	2.0	7	9	14	7	sw.	C. F. Leipprandt.
Highland	Oakland	830	20	.....	.....	.....	.....	.....	.....	.....	3.07	+ 0.38	1.34	T.	7	.....	.....	.....	.....	A. D. DeGarmo.
Hillsdale	Hillsdale	1,150	15	47.6	+ 2.2	73	6†	22	3	34	2.63	+ 0.13	0.87	T.	9	15	2	13	s.	C. L. Herron.
Holland	Ottawa	610	6	45.6	.....	71	21	21	3	35	2.83	.....	0.64	1.0	13	10	14	6	sw.	City of Holland.
Howell	Livingston	924	20	47.6[b]	+ 2.6	73	15	21[c]	3	41[c]	3.33	+ 1.05	1.00	T.	10	8	14	8	sw.	Frank Sharp.
Ivan	Kalkaska	.....	23	42.2	+ 0.7	66	6†	8	1	41	1.67	− 0.54	0.62	3.0	9	6	20	4	nw.	O. L. Giddings.
Jackson	Jackson	927	15	48.6	+ 1.9	74	6†	21	3	38	2.76	+ 0.41	1.06	T.	9	14	6	10	w.	City of Jackson.
Jeddo	St. Clair	667	23	43.4	+ 0.4	72	15	19	3	33	3.87	+ 1.72	1.61	T.	9	10	11	9	nw.	William Bice.
Kalamazoo	Kalamazoo	955	36	47.1	+ 0.3	74	6	20	3	36	3.25	+ 0.59	1.45	.....	5	14	9	7	w.	Kalamazoo Asylum.
Lansing (Agrl. Col.)	Ingham	820	48	45.6	0	72	6	22	3	32	3.12	+ 0.58	1.03	0	13	11	7	12	sw.	U. S. Weather Bureau.
Lansing (Capitol)	....do	881	25	46.4	− 0.6	76	5	21	2	40	3.00	+ 0.54	1.04	T.	13	12	4	14	sw.	State Board of Health.
Lapeer	Lapeer	827	13	46.8	+ 2.7	72	6	20	3	47	2.53	+ 0.57	0.85	T.	7	4	20	6	sw.	Michigan Home.
Ludington	Mason	586	14	42.8	+ 1.6	65	25	20	3	29	0.68	− 1.75	0.32	2.0	4	20	9	1	sw.	Pere Marquette R. R.
Luther	Lake	1,028	2	44.4	.....	69	11	12	3	37	1.41	.....	0.54	4.0	9	11	13	6	sw.	John W. Nichoson.
Mackinaw	Cheboygan	592	21	39.0	+ 0.9	64	6	22	7	34	0.34	− 1.45	0.22	0	2	22	6	8	sw.	Grand Rapids & Indiana Ry.
Mancelona	Antrim	1,121	16	41.4	+ 0.1	67	6	8	1	41	0.20	− 1.58	0.20	2.0	1	21	7	2	s.	Do.
Manistee	Manistee	600	15	44.1	+ 1.5	69	27	12	3	36	1.24	− 1.24	0.42	3.0	4	11	10	9	nw.	Pere Marquette R. R.
Marshall	Calhoun	896	0	47.8[c]	.....	81[c]	11	14[c]	3	57[c]	.....	.....	.....	.....	.....	14[c]	0[c]	11[c]	.....	E. B. Stuart.
Midland	Midland	604	13	46.4[d]	+ 1.8	79[d]	27	20[d]	3	40[d]	.....	.....	.....	.....	.....	9	7	14	se.	Pere Marquette R. R.
Morenci	Lenawee	811	5	48.6	.....	77	15	25	3	36	1.97	.....	0.45	0	10	15	3	12	sw.	George J. Tripp.
Mount Clemens	Macomb	615	12	46.6	+ 1.6	77	15	23	3	42	2.86	+ 1.17	0.80	T.	8	10	7	13	ne.	Waterworks.
Mount Pleasant	Isabella	826	13	48.6	+ 3.2	76	5	15	1	46	1.03	− 1.14	0.43	1.2	4	19	3	8	w.	Pere Marquette R. R.
Muskegon	Muskegon	587	16	46.1	+ 2.1	68	14	20	3	33	0.78	− 1.44	0.30	7.8	7	22	1	7	sw.	Grand Rapids & Indiana Ry.
Old Mission	Grand Traverse	858	18	40.8	− 1.9	67	25	9	1	32	1.49	− 0.79	0.53	2.0	7	7	18	5	n.	E. C. Ladd.
Olivet	Eaton	934	22	45.9	+ 0.5	71	6	19	3	33	2.89	+ 0.02	1.37	0.3	11	11	6	13	s.	G. A. Knapp.
Omer	Arenac	616	13	41.7	− 0.1	75	6	11	3	55	.....	.....	.....	.....	.....	17	3	10	w.	Detroit & Mackinaw Ry.
Onaway	Presque Isle	826	9	38.5	.....	68	16†	10	1†	47	.....	.....	.....	.....	.....	18	0	12	n.	Do.
Owosso	Shiawassee	731	15	49.0	+ 3.8	76	7	21	3	46	2.93	+ 0.23	0.78	.....	11	4	21	5	n.	Owosso Sugar Co.
Petoskey	Emmet	660	22	40.8	+ 0.3	70	6†	8	1	37	1.52	− 0.09	0.90	T.	7	6	13	11	w.	Grand Rapids & Indiana Ry.
Plymouth	Wayne	725	15	46.0	+ 0.3	75	15	18	8	36	2.39	+ 0.53	0.88	T.	6	18	0	12	nw.	Pere Marquette R. R.
Pontiac	Oakland	935	12	45.8	− 1.1	74	15	20	3	38	2.21	− 0.71	1.14	T.	8	14	6	10	ne.	Fred W. Shaw.
Port Austin	Huron	618	15	43.5	+ 2.4	71	15	19	3	42	1.17	− 0.27	0.35	1.0	7	15	7	8	n.	Pere Marquette R. R.
Port Huron	St. Clair	639	37	43.8	+ 1.6	72	15	21	3	33	3.10	+ 1.03	0.98	0.2	11	9	12	9	ne.	U. S. Weather Bureau.
Reed City	Osceola	1,033	15	43.6	+ 0.8	70	6	13	2	46	0.75	− 1.52	0.26	3.0	7	11[a]	5[a]	13[a]	nw.	Pere Marquette R. R.
Roscommon	Roscommon	1,141	11	39.4	− 1.6	64	26†	2	1	38	1.28	− 1.53	0.36	1.5	7	5	22	3	nw.	Marcus Schaaf.
Saginaw	Saginaw	601	10	47.8	+ 3.0	74	6	22	3	40	2.80	− 0.28	0.85	T.	10	12	13	5	ne.	Postmaster.
Saginaw West Side	....do	601	17	46.2	+ 1.2	73	6	20	3	37	2.72	+ 0.12	0.90	T.	11	13	9	8	nw.	Robert B. Hudson.
St. James	Charlevoix	681	6	.....	.....	.....	.....	10	1	.....	1.57	.....	0.45	.....	7	16	2	12	nw.	James Malone.
St. Joseph	Berrien	593	25	46.2[a]	− 0.2	72[a]	6†	28[a]	1	29[a]	2.84	+ 0.22	0.80	0	9	11[a]	6[a]	12[a]	sw.	City of St. Joseph.
Sandusky	Sanilac	790	3	43.5	.....	73	15	16	3	36	3.23	.....	1.20	0	10	13	7	10	nw.	Pere Marquette R. R.
Saranac	Ionia	639	17	47.6	+ 3.0	75	6	21	3	38	2.57	− 0.05	0.70	0	10	9	2	19	sw.	John Wallington.
South Haven	Van Buren	585	16	43.4	− 1.0	70	26	29	3	28	3.20	+ 0.67	1.60	T.	4	14	13	3	sw.	Mrs. M. E. DeDiemar.
Stanton	Montcalm	880	18	45.4[a]	+ 0.6	68[a]	12†	24[a]	2†	37[a]	.....	.....	.....	.....	.....	10[a]	12[a]	7[a]	sw.	City of Stanton.
Thornville	Lapeer	975	35	45.0	− 1.1	72	15	24	3	32	2.69	+ 0.22	1.03	T.	5	14	4	12	nw.	J. S. Caulkins.
Traverse City	Grand Traverse	588	15	42.8	+ 1.9	69	6	11	1	40	0.60	− 1.44	0.40	4.0	3	15	11	4	nw.	GrandRapids & Indiana Ry
Vassar	Tuscola	641	11	46.4	+ 1.4	74	6	21	3	35	2.89	+ 1.11	0.87	0	6	11	10	9	sw.	Pere Marquette R. R.
Wasepi	St. Joseph	842	15	48.9	+ 3.2	74	6†	24	3	38	3.31	+ 0.40	1.04	T.	11	14	0	16	nw.	Charles A. Palmer.
West Branch	Ogemaw	973	7	.....	.....	.....	.....	5	3	.....	1.04	− 0.37	0.28	T.	5	10	14	6	nw.	Michigan Central R. R.
Woodlawn (P.O Vienna)	Montmorenci	.....	14	38.2	− 2.6	65	15	− 1	1	40	1.62	− 1.01	0.65	7.0	5	15	6	9	sw.	T. C. Mathews.
Ypsilanti	Washtenaw	736	27	46.2	+ 0.1	75	15	23	3	37	2.73	+ 0.23	0.76	T.	10	4	21	5	nw.	Orin J. Bemiss.
Ohio.																				
Akron	Summit	1,081	25	49.8[a]	+ 2.0	76[a]	15	26[a]	3†	37	5.60	+ 2.79	1.13	3.5	15	7	8	15	sw.	Prof. C. R. Olin.
Antwerp	Paulding	733	....	51.1	.....	83	12	25	3	38	2.75	.....	0.62	T.	7	16	0	14	sw.	North G. Osborn.
Benton Ridge	Hancock	800	19	50.4	+ 1.1	79	12	22	3	36	3.48	+ 0.64	0.70	5.0	10	12	8	10	sw.	J. W. Powell.
Bowling Green	Wood	670	31	49.2	+ 1.2	78	15	25	3	36	2.31	− 0.68	0.60	T.	10	18	2	12	ne.	G. C. Houskeeper.
Bucyrus	Crawford	1,000	18	50.0	+ 1.4	79	12†	22	3	38	2.68	− 0.55	0.50	5.0	14	14	4	12	se.	James R. Hopley.

TABLE 1.—*Climatological data for April, 1912. District No. 4*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.				Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	
Ohio—Continued.																			
Cleveland (1)	Cuyahoga	762	41	48.0	+ 2.0	77	15	22	3	34	3.68	+ 1.37	1.02	6.7	14	6	12	12	w.	U. S. Weather Bureau.
Cleveland (2)	do	754	15	49.4	+ 3.3	76	15	24	3	31	5.00	+ 2.70	1.49	6.0	11	15	2	13	sw.	Rev. F. L. Odenbach, S. J.
Conneaut	Ashtabula	675	2	46.4[a]	.....	79	15	24[b]	3	37	4.38	.....	1.00	4.5	11	13	6	11	sw.	E. L. Ransom.
Findlay	Hancock	776	23	50.8	+ 1.6	81	16	21	3	40	3.94	+ 1.07	0.79	4.0	13	20	3	7	sw.	Dr. E. A. Moser.
Fremont	Sandusky	628	10	49.8	+ 1.3	79	15	22	3	36	2.98	− 0.53	0.72	2.0	6	14	6	10	sw.	E. Stanley Thomas.
Hedges	Paulding	725	18	52.1	+ 3.2	81	12	26	3	39	3.07	+ 0.12	1.13	0	8	14	6	10	sw.	Charles Stutzman.
Hillhouse	Lake	907	19	47.1	+ 2.3	77	15	21	3	37	4.00	+ 1.13	1.18	6.0	10	13	11	6	sw.	J. W. Doncaster.
Hiram	Portage	1,260	32	48.9	+ 2.4	76	15	23	3	36	3.48	+ 0.45	1.37	4.0	11	12	11	7	nw.	Prof. G. H. Colton.
Hudson	Summit	1,153	51	49.8	+ 3.3	78	15	16	3	38	6.98	+ 4.28	1.60	6.0	17	15	4	11	sw.	Dr. W. I. Chamberlain.
Lima	Allen	875	13	51.2	+ 2.8	78	15	19	3	36	3.46	− 0.04	0.97	5.0	9	17	7	6	w.	Miss Ollie DeLong.
Medina	Medina	944	24	50.4	+ 2.9	79	12	25	3	41	6.36	+ 2.22	1.70	4.0	8	17	2	11	s.	F. W. Clark.
Montpelier	Williams	880	20	49.7	+ 2.0	76	12†	25	3	38	2.11	− 0.96	0.74	.....	9	14	6	10	w.	G. L. Laser.
Napoleon	Henry	680	25	50.2	+ 1.7	78	15	27	3	34	2.25	− 0.42	0.75	0	12	16	2	12	nw.	A. C. Senter.
New Bremen	Auglaize	1,038	19	52.2	+ 2.4	80	12	17	3	35	2.90	+ 0.34	0.95	3.5	7	5	14	11	sw.	Miss Lillian Grothaus.
North Royalton	Cuyahoga	1,000	19	48.2	+ 1.2	78	5	27	2†	36	5.95	+ 3.21	1.35	6.0	9	13	8	9	nw.	W. S. Edgerton.
Norwalk	Huron	719	26	49.4	+ 2.1	78	15	20	3	40	4.37	+ 1.91	0.73	6.0	10	6	13	11	w.	Giles R. Gregory.
Oberlin	Lorain	855	37	49.5	+ 2.2	78	15	22	3	40	4.79	+ 2.09	1.32	8.0	14	10	4	16	s.	Prof. F. F. Jewett.
Ottawa	Putnam	720	19	51.2	+ 1.6	80	12	25	3	38	2.92	− 0.11	0.65	.....	10	12	12	6	w.	Prof. J. T. Maidlow.
Sandusky	Erie	629	35	47.6	+ 0.3	78	15	22	3	37	2.43	− 0.12	0.66	2.4	13	11	7	12	sw.	U. S. Weather Bureau.
Tiffin	Seneca	775	30	50.3	+ 1.5	75	14	25	1†	32	5.03	+ 2.17	1.21	7.0	12	8	14	8	sw.	Proj. T. H. Sonnedecker.
Toledo	Lucas	709	41	48.4	+ 1.1	75	15	26	3	34	2.72	+ 0.44	0.75	T.	13	13	7	10	sw.	U. S. Weather Bureau.
Upper Sandusky	Wyandot	854	29	51.0	+ 1.1	78	12†	21	3	33	3.90	+ 1.00	1.05	4.0	10	12	10	8	sw.	Robert E. Tracht.
Vickery	Sandusky	588	19	49.1	+ 1.4	77	15	20	3	37	3.48	+ 0.92	0.76	2.0	11	11	9	10	s.	John W. Barr.
Wauseon	Fulton	780	40	47.1	0.0	78	15	26	3	38	1.82	− 1.24	0.50	T.	12	7	12	11	w.	Thomas Mikesell.
Willoughby	Lake	649	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	7	11	w.	C. M. Richardson.
Pennsylvania.																				
Erie	Erie	658	39	45.5	+ 0.8	78	15	26	3	38	4.22	+ 1.82	0.99	6.1	13	7	13	10	w.	U. S. Weather Bureau.
New York.																				
Adams Center	Jefferson	540	21	41.8	+ 1.7	74	15	8	4	36	2.99	+ 0.34	0.50	13.5	13	11	13	6	w.	A. E. Cooley.
Angelica	Allegany	1,340	29	43.6	+ 0.3	72	15	13	4	42	4.48	+ 1.56	1.36	10.5	13	2	6	22	w.	Charles P. Arnold.
Appleton	Niagara	270	21	43.2	− 0.7	80	15	23	3	38	3.00	+ 0.73	0.55	6.2	13	10	9	11	ne.	H. A. Van Wagoner.
Auburn	Cayuga	715	43	44.4	− 0.6	76	6	16	4	38	4.68	+ 2.16	0.80	10.0	14	13	11	6	n.	A. H. Underwood.
Avon	Livingston	585	17	44.5	0.0	77	15	18	4	39	1.61	− 0.48	0.43	3.8	8	5	12	13	.....	W. G. Markham.
Blue Mountain Lake	Hamilton	1,750	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. F. Merwin.
Brockport	Monroe	537	16	43.5	− 1.1	79	15	20	3†	36	3.04	+ 0.19	0.44	6.5	18	7	17	6	s.	W. H. Lennon.
Buffalo	Erie	767	61	42.2	− 0.1	73	15	20	3	37	3.39	+ 0.94	0.86	4.5	16	4	12	14	w.	U. S. Weather Bureau.
Canton	St. Lawrence	448	18	40.6	− 1.9	69	15	16	4	44	2.46	+ 0.20	0.48	3.8	14	10	12	8	s.	Do.
Cape Vincent	Jefferson	246	7	40.0	.....	73	15	18	4	38	3.27	.....	0.91	.....	12	14	7	9	s.	J. Harry Grapotte.
Carvers Falls	Washington	243	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Washburne Fancher, C.E.
Castile	Wyoming		0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Caroline Bishop.
Chazy	Clinton	151	12	41.6	− 0.9	73	16	17	1	39	1.58	0.00	0.48	4.0	6	14	9	7	n.	W. R. North.
Dannemora	do	1,490	7	40.9	.....	69	6†	12	1	39	2.29	.....	0.56	12.0	13	13	5	12	w.	Dr. W. N. Thayer.
Elba	Genesee	500	13	42.6	0.0	78	15	15	4	42	2.89	− 0.25	0.60	12.0	10	10	11	9	nw.	Joseph S. Wilford.
Faust	Franklin	1,550	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Santa Clara Lumber Co.
Fayetteville	Onondaga	530	11	44.6	− 0.7	78	6	13	4	38	4.19	+ 1.44	0.72	8.5	18	13	6	11	nw.	Dana H. Wells.
Gabriels	Franklin	1,729	10	38.1	.....	69	7	4	4	40	3.30	.....	0.35	14.0	14	15	7	8	w.	Gabriels Sanitarium.
Harkness	Clinton	622	10	41.8	+ 0.2	71	16	13	3	44	2.25	+ 0.57	0.60	12.0	13	22	4	4	w.	J. W. Harkness.
Hunt	Livingston	1,321	13	45.6	+ 1.1	80	15	18	4	44	3.64	+ 0.68	1.24	6.0	7	4	10	16	nw.	W. S. Barager.
Ithaca	Tompkins	928	34	44.5	+ 0.3	76	6	20	3	37	2.97	+ 0.68	0.94	10.5	16	9	10	11	nw.	U. S. Weather Bureau.
Keene Valley	Essex	1,000	14	42.2	+ 0.8	77	6†	15	10	49	2.34	− 0.39	0.58	13.5	12	17	5	8	nw.	E. R. Wells.
Kings Ferry	Cayuga		12	.....	.....	.....	.....	.....	.....	.....	2.75	+ 0.17	0.58	8.3	11	9	6	15	se.	Lucius A. Goodyear.
Lake George	Warren	350	15	44.4	+ 0.7	72	6†	16	4†	41	3.48	+ 0.75	0.64	9.1	15	9	14	7	s.	Charles Forsell.
Lake Placid Club	Essex	1,864	4	33.9	.....	68	6†	6	4	46	3.33	.....	0.51	22.7	16	11	11	8	nw.	Henry Van Howenberg.
Lockport	Niagara	520	25	43.8	− 1.4	77	15	21	4	32	2.97	+ 0.74	0.68	1.0	14	8	11	11	sw.	Robert N. Clark.
Lowville	Lewis	900	45	38.3	− 4.2	67	16	14	4†	36	.....	.....	.....	.....	.....	12	8	10	s.	Charles J. Rice.
Moira	Franklin	200	12	40.9	− 1.7	69	7†	7	4	39	3.17	+ 0.69	0.52	12.5	10	7	13	10	w.	C. E. McBride.
Nehasane	Hamilton	1,750	4	36.2	.....	64	6	0	4	41	3.79	.....	0.55	20.5	16	13	11	6	nw.	L. W. Brown.
Ogdensburg	St. Lawrence	175	28	40.2	− 3.8	72	16	11	2	39	2.36	+ 0.27	0.90	T.	4	14	8	8	se.	State Hospital.
Old Forge	Herkimer	1,733	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. S. W. Nelson.
Oswego	Oswego	335	42	41.6	− 1.6	75	15	22	3	32	2.92	+ 0.66	0.70	5.5	15	8	9	13	s.	U. S. Weather Bureau.
Otto	Cattaraugus	1,410	8	45.1	.....	78	15	20	4†	37	4.28	.....	1.75	4.4	10	11	8	11	.....	William J. Winke.
Palermo	Oswego	460	53	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. B. Bartlett.
Perry City	Schuyler	1,038	32	42.0	− 1.1	71	15	11	4	43	3.62	+ 0.87	0.84	10.4	16	4	8	18	nw.	W. H. Jeffers.
Philadelphia	Jefferson	485	6	42.0	.....	73	15	11	10	38	3.51	.....	0.67	8.0	14	11	10	9	se.	E. D. Babcock.
Potsdam	St. Lawrence	300	36	41.2	− 2.1	71	27	8	4	45	2.47	+ 0.61	0.41	6.0	10	.....	.....	.....	.....	A. E. Sutherland.
Raquette Lake	Hamilton	1,776	4	35.8	.....	62	26	10	9	38	4.89	.....	0.99	21.6	14	10	3	17	w.	R. J. Denning.
Rochester	Monroe	523	83	44.0	+ 0.1	80	15	22	3	36	3.27	+ 0.83	0.59	6.9	15	7	8	15	w.	U. S. Weather Bureau.
Romulus	Seneca	719	20	44.2	− 1.5	75	6	17	4	39	2.25	− 0.24	0.90	11.0	11	11	4	15	nw.	John H. Coryell.
Shortsville	Ontario	740	13	43.9	− 0.1	76	6†	19	4	34	2.63	+ 0.32	0.40	1.8	15	8	5	17	nw.	C. H. Latting.
Skaneateles	Onondaga		17	.....	.....	.....	.....	.....	.....	.....	5.02	+ 2.14	0.57	.....	19	.....	.....	.....	.....	Edward Couron.
Syracuse	do	597	10	43.3	− 1.1	75	6	20	4	38	3.66	+ 1.35	0.68	9.3	18	7	9	14	nw.	U. S. Weather Bureau.
Ticonderoga	Essex	344	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Eva M. De Lano.
Tupper Lake	Franklin	1,522	12	38.0	− 0.6	66	6	9	1	39	3.34	+ 1.27	0.65	13.0	14	15	4	11	w.	Rev. A. W. Maddox.
Volusca	Chautauqua	1,167	13	43.9	− 1.6	74	15	20	3	40	4.15	+ 1.32	0.72	6.0	11	5	15	10	s.	Benjamin Breads.
Wanakena	St. Lawrence	1,620	2	38.3	.....	65	6†	7	4	40	2.53	.....	0.47	11.5	13	12	10	8	nw.	J. Otto Hamele.
Watertown	Jefferson	737	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. P. Dunlap.
Wedgwood	Schuyler	1,430	23	43.5	− 0.2	72	6†	17	4	32	4.24	+ 1.37	1.20	8.0	16	10	9	11	nw.	O. F. Corwin.
Westfield	Chautauqua	837	16	46.0	+ 1.3	78	15	22	3	38	4.30	+ 1.84	0.66	2.0	13	9	12	9	.....	John R. Rogers.
York	Livingston	760	0	45.4	.....	80	15	18	4	41	2.56	.....	0.51	5.6	15	6	7	17	nw.	M. N. Stewart.
Youngstown	Niagara		10	.....	.....	.....	.....	.....	.....	.....	2.71	.....	0.62	2.5	12	1	23	6	w.	B. V. Brookins.
Vermont.																				
Burlington	Chittenden	404	4	40.6	− 0.1	72	16	18	1	38	2.97	+ 1.10	0.83	6.9	12	10	6	14	s.	U. S. Weather Bureau.
Cornwall	Addison	517	18	43.2	− 2.1	76	16	18	4	38	2.30	+ 0.74	0.51	10.0	10	12	7	11	n.	C. H. Lane.
Enosburg Falls	Franklin	601	20	40.7	− 2.0	71	16	11	1	42	3.76	+ 1.52	1.27	8.0	14	13	9	8	nw.	L. H. Pomeroy.
Northfield	Washington	876	25	39.1	− 1.1	71	16	18	9†	42	1.95	− 0.14	0.30	6.9	15	10	8	12	s.	U. S. Weather Bureau.
Wells	Rutland	750	20	41.7	− 0.1	68	16	10	4	30	3.72	+ 1.84	0.66	10.0	15	7	12	11	sw.	E. R. Pember.

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 4, Lake Region.*

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Minnesota.																																
Cloquet	Lake Superior						.10						.15		.17	.24						.30				.77	.56					2.29
Duluth	do		T.				.27				T.	.03			.28	.04						.44	T.	T.		.78	.74		T.			2.58
Floodwood	do																															
Stephens Mine	do						T.									T.						T.		T.		.15	1.20		.15			1.50
Two Harbors	do														.08	.04						.17	.08	.04		.20	.85					1.46
Virginia	do						T.					.10				T.								T.		.07	1.20	.16				1.53
Wisconsin.																																
Appleton	Fox	T.					.10	.01	.03						.40	.01	T.					.03	1.16	T.	.12	.27						2.13
Ashland	Lake Superior						.44	T.								.52						.65	.20	.10		.13	.60					2.64
Bayfield	do											.06	.02		.32	.19						.35		.50			1.02					2.46
Cecil	Fox						.06				.18				.26							.70		T.	.18		.23					1.61
Crandon	do						T.						T.		.02	.04						.85	.04		.09		.66					1.70
Florence	Menomonee						*	.31				.12			.20	.27						*	1.20		.07		.45					2.02
Fond du Lac	Fox						.08	T.							.32	T.			T.			.31	.05		.02	T.	.18		.03			0.94
Grand River Locks	do						.12	.03							.55							.20	.08		.02	.03	.30		T.			1.33
Green Bay	Lake Michigan	T.	T.				.15					.21	.17		.52	.01	T.					.75	.01	.01		.02	.21					2.06
High Falls	do																															
Iron River	Lake Superior						.01	.31	T.		T.	.05			.37							.17		.15		.12	.65	.03				1.86
Kewaunee	Lake Michigan											.42		.59	T.	T.						.59		.03		.05	.15					1.83
Manitowoc	do	T.					.15								.45				T.			.10	T.	.05		T.	.15		.08			0.98
Menasha	Fox						.41								.27	T.						.76		.09		.21						1.74
Menomonee Falls	Lake Michigan	.01					.08	T.							.42	T.	T.	T.	.25			.12	T.	T.	.08		.09		.27	.37		1.69
Milwaukee	do	.03	T.				.02	.01							.45			.31	.37			.12	T.	.09			.02		.26	.04		1.72
New London	Fox						.10	T.							.40	T.							.40	.06		.04	.35					1.35
Oconto	Lake Michigan						T.								.41	.11						.22	.31				.35					1.40
Oshkosh	Fox						.07		T.						.30							.18	.04		.02	T.						0.61
Pine River	do						T.					T.			.28	T.						.45		.01	.02	.01	.19					0.96
Plum Island	Lake Michigan						.10						.05		.37	.06	T.					.44	.40		.05	.08	.19	T.					1.74
Plymouth	do						.02	T.	.10						.30		T.		.05			.13	T.	T.		T.	.13		.10	T.		0.83
Port Washington	do						.23								.33				.40			.18		.05					.12	.28		1.59
Racine	do	.07	T.				.09	.02							.52		T.	T.	.72			.07	T.				T.		.56	.13		2.18
Ripon	Fox						.13								.50	T.						.12	.06		.02	T.	.15			T.		0.98
Sheboygan	Lake Michigan		T.				T.	T.	.12				.05		.42		T.		.07			.16	T.		T.	T.	.14			.12		1.08
Sturgeon Bay	do						.35								.71	.05						.29	.78			.01	.12					2.31
Superior‖	Lake Superior							.26					.01		.25	.09	.03						.44				1.09	.17				2.34
Waupaca	Fox						.20		.03						.40	.03						.72		.08		.02	.28					1.76
Illinois.																																
Chicago	Lake Michigan	.43					.15	T.		.01			T.		.05			.68	.15			T.	.03			T.	T.		1.02	.03		2.55
Evanston	do	.55					.18			T.			T.		.02		T.	.50	.48			.33	.13				.01		.66	.28		3.14
Indiana.																																
Auburn‖	Maumee		.25	T.				.19				T.	.23		.02	.15			.45	T.			.15		T.		T.			.15	.55	2.14
Berne	do	.40	.46					.33			T.		.38	.10	.04			.90	.03				.14		.04		.10		.52	.60	.02	4.15
Elkhart	St. Joseph	.51											.22	.21	.18			.13	.38				.57				.09			1.42		3.71
Fort Wayne	Maumee	.33					.20	.03					.37	T.	.03			.36	.10		T.	.37	.12		T.		.09		.13	.31		2.44
Hammond	Lake Michigan						.40								.12	.04		.20	T.	T.		.15							.48	.90	.09	2.38
Howe‖	St. Joseph		.10											.73		.37			.45				.30							1.78	.11	3.84
Notre Dame	do	.29					.45	T.		T.			.21	.01	.12			.31	.16			.09	.03				.02		.16	.83		2.68
Whiting	Lake Michigan	.25					.28	T.		.02					.11			.54	.27			.08	.04				.03		.72	.52		2.83
Michigan, Upper Peninsula.																																
Baraga	Lake Superior																															
Bergland	Ontonagon						.43	.19					T.		.10	T.	T.					.26	.10	.16		T.	.40	T.				1.64
Blaney	Manistique																															
Calumet	Lake Superior	T.		.16			.47	.19	T.						.43	.10	T.					.55	.04	.15		.09	.53	.44				3.15
Chatham	do						.09	.11	.01			.02			.12	.31	.12					.48	.29		.26	.19	.16	.19	.05			2.40
Deer Park	do						T.	T.							T.							.20	.50		T.		.60					1.30
Detour	St. Marys															.20							.30									
Eagle Harbor	Lake Superior			T.			.40	.08	T.						.20	.08			.80			.45		.10		*	.48					1.79
Escanaba	Lake Michigan			T.			T.	T.	T.			.15	.01		.42	.07						.83	.02	.11	T.	.02	.28					1.91
Ewen	Ontonagon	T.	T.				.05	.22							T.	T.	.04					.62		.04		.04	.25					1.26
Grand Marais	Lake Superior			.20				.02	.01	.02					.30	.20	T.					.70	.01		.10	.01	.35	.20				2.12
Green	do																					.19				T.	T.					0.19
Houghton	do	T.	T.	.04			.57	.04	T.				T.		.34	.04	.01					.70		.05		.14	.56					2.49
Humboldt	Escanaba																															
Iron Mountain	Menominee		T.				.10						.11		.40	.20						1.52				.05	.35					2.73
Iron River	do						.40	T.				.40	.30		.30	.40	T.					.80	T.		.35	T.	.85	.15				3.95
Ironwood	Lake Superior						1.00	.43							.49	.21	.27					.45	.53	.12		.19	.20	T.				3.89
Ishpeming	Escanaba		.01	.02			.40	.20				T.			.30	.25	.01					.60	.02	T.	.60	T.	.10	T.				2.51
Isle Royale	Lake Superior																															
Mackinac Island	Lake Huron		T.	T.			T.	T.		T.				.73	.10	T.			.25			.93	.19		.46		.41	T.				3.07
Maple Ridge	Lake Michigan						.30								.45	.15						.65	.50				.50					2.55
Marquette	Lake Superior		.01	T.			.16	.20			T.		T.		.43	.88	.04				T.	1.12	.15	.22		.01	.18	.01				3.01
Menominee	Menominee						T.						.25		.50	.25						.51				T.	.27					1.78
Munising	Lake Superior			T.			.10	.17							.18	.22						.53	.24	.01	.20	.04	.33	.07				2.00
Newberry	Tequamenon				T.		.09	.10		.04					.54	.02	.01					.20	.36		.10		.59	.01				2.06
Powers	Lake Michigan																															
St. Ignace	Lake Huron																		.10			.03	.05									0.18
Sault Ste. Marie	St. Marys				T.		.06	.02	.01	.01					.23	.01	T.		.03			.52	.23	.25	.04	T.	.89	T.				2.30
Seney	Manistique			T.			.10		.10					.18	.17	.07					.03	.78		.14		.36	.40					2.33
Thomaston	Lake Superior						.10									T.	.05					.30		T.		.01		.22				0.68
Victoria	Ontonagon		T.				.55	.15							.07	.02	.08					.37	.11	.01		.11	.53	T.				2.00
Watersmeet	do						.49	.03				.12	.09		.09	.05	.11					1.02	.05	.05	.14	.11	.95	.03				3.33
Whitefish Point	Lake Superior						.27	.06		.06					.34	.05						.21	.45		.26		.26	.11				2.07
Michigan, Lower Peninsula.																																
Adrian	Raisin	T.					.30						.72		.20			.30	.15				.40						.50	.88		3.45
Allegan	Kalamazoo	.16					.02								.21			.34	.41										.27	.11		1.52
Alma	Saginaw	T.					T.	.08					.32		.33			.06	.48			T.	.08		T.		.06		.27	.25		1.93
Alpena	Lake Huron	T.	T.	.02			.15	T.	.15			.12			1.04	.01			.42			.21	.13	.03	T.		.01					2.29
Ann Arbor	Huron	.21	T.					.77					T.	.24	.40			.25	.33				.65				.02		.09	1.00		3.96
Arbela	Saginaw	.21	T.					.18					.78		.64				.59				.17		.11				.16	.22		3.64

TABLE 2.—*Daily precipitation for April, 1912. District No. 4*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Michigan, Lower Peninsula—Con.																																
Battle Creek	Kalamazoo	.48						.53						T.	.11			.35	.38				T.						.50	.66		3.01
Bay City	Saginaw												.20					1.00									.10					1.30
Benzonia	Betsey							T.	T.				.35		.18	T.	T.		.18			.12	.19		.06	T.	.05					1.13
Berlin	Clinton	.57	.03					.17			T.		.30		.16			.13	.26				.15				T.		.87	.21		2.85
Big Rapids	Muskegon	.03						.44					.70		.30				.77			.40			.03		.05		.20			2.92
Bloomingdale	Lake Michigan	.18						.23							.06			.42	.41			T.							.40			1.70
Cadillac	Manistee							.06						.28	.20				.40				.32		.05							1.31
Cassopolis	St. Joseph																															
Charlevoix	Lake Michigan											T.			T.				.20			.86					.08					1.14
Charlotte	Kalamazoo	.14						.12							.12			.08	T.				.15						.15	.88		1.64
Cheboygan	Cheboygan			T.			T.												.25				.10					.50				0.85
Clinton	Raisin	.30						.19	.10				.10		.43			T.	.56				.43				T.		T.	.80		2.91
Coldwater	St. Joseph	.30						.35	T.				.20		.03			.05	.51				.26				.07			.92	.07	2.76
Concord	Kalamazoo	.20						.10					T.		T.			.40	.34				.10				T.		T.	.65		1.79
Croton	Muskegon	T.						T.							.20		T.		1.30				1.00		.15		T.		T.	.40		3.05
Detroit	Detroit	.24	T.				T.	.25					T.	.05	.03			.41	.08			.38	.03				.01		.26	.43		2.17
Durand	Saginaw								T.										T.													
East Tawas	Lake Huron	T.	T.				T.		T.	T.		.18	.15		.55		.04		.20			T.	.12	T.			T.					1.24
Eloise	Rouge	.37	T.	T.				.21					T.	.04	.32			.40	.12				.66	.03			T.		.01	1.05	.01	3.22
Flint	Saginaw	.25						.45					.04		.34				.45	.15				.05	.05					.90			2.68
Frankfort	Betsey												.20		.20				.20			.10	.60									1.30
Ganges	Lake Michigan	.38						.29	.02						.46			.62	.58				.11						.62	.21		3.29
Gaylord	Cheboygan		T.	T.				T.	.10	T.		.33			.22				.24			T.	.73				.19					1.81
Gladwin	Saginaw														1.50				.70										.15			2.35
Grand Haven	Grand	.03					.08	.01	T.			T.			.49			.79	.55			.19	.01	.06	.01	T.	.06		.58	.04		2.90
Grand Rapids	do	.12	T.				.17	T.					T.		.13			.56	.42			.26	.02	.06	T.	T.	.01		.71	T.		2.46
Grape	Raisin	.29	.01					.11					.01		.07			.46	.10			.31	.03				.02		.05	.77		2.33
Grass Lake	Grand	.20						T.						.15	.08			.08	.65				.20						.10	.18		1.64
Grayling	Au Sable						.06	T.				.15	.18		.22	.06	.02		.15			.15	.26		.10		T.					1.35
Harbor Beach	Lake Huron	.20													.90				.15				.05									1.30
Harrison	Saginaw							.23	T.						.19				.30		.29				.09				.26			1.36
Harrisville	Lake Huron	.10		.01			.06			.05		.15	.10		.67	.06			.42				.28	.02			.15					2.07
Hart	Pentwater																	.10	.10			.10	.20									0.50
Hayes	Pigeon	.20											.14		.25				.73				.20		.8					.10		1.70
Highland	Huron												.47		.28			.46	.17						.10				.25	1.34		3.07
Hillsdale	St. Joseph	.32					T.	.05	T.				.17					.20	.01				.87				.05		.19	.77		2.63
Holland	Lake Michigan	.14					.16	.02	.03				T.	T.	.27			.57	.58			.28	.01		.01		.02		.64	.10		2.83
Howell	Saginaw	.30	.05					.50							.10			.20	.70	.03			.30				T.		.15	1.00		3.33
Ivan	Manistee						T.	T.					.25		.22		.02		.28			.12	.62		.11		.03	.02				1.67
Jackson	Grand	.35						.28	.02					.08	.18			.18	.39				.18				T.		.04	1.06		2.76
Jeddo	St. Clair	.20	T.					.06					.70		.17			T.	1.61	T.			.05	.56					.10	.42		3.87
Kalamazoo	Kalamazoo	.23						.10											1.45				.45							1.00		3.25
Lansing (Agr. Col.)	Grand	.35					.35	.18					.02		.23			.34	.41			.12	.01		.06		.02		.92	.11		3.12
Lansing (Capitol)	do	.33					.31					.01		.05	.17			.60	.20			.15	.03	.07		.04			1.00	.04		3.00
Lapeer	Saginaw	.20	T.					T.					.32		.66			.25	.10										.15	.85		2.53
Ludington	Pere Marquette						T.												.15				.32						.09			0.68
Luther	Manistee	T.					T.	.05	T.				.15	T.	.23				.54			.20	.04		.06		.02		T.	.06		1.41
Mackinaw	Lake Huron														.22										.12							0.34
Manceiona	Lake Michigan											T.			T.		T.		.20			T.	T.									0.20
Manistee	Manistee												.22		.30				.30			.42										1.24
Marshall	Kalamazoo																															
Midland	Saginaw																															
Morenci	Maumee	.25						.24					.02		.04			.45	.12				.32				.07		.05	.41		1.97
Mount Clemens	Clinton	.30	T.	T.				T.					.34		.17			.22	.06	T.			.20		T.		T.		.80	.77		2.86
Mount Pleasant	Saginaw								.43				.23		.25				.12													1.03
Muskegon	Muskegon						.01											.05	.30			.05	.02			.10			.25			0.78
Old Mission	Lake Michigan											.20	.10		.35				.20			.06	.53		.05		T.					1.49
Olivet	Kalamazoo	.28					.24	.03						.03	.21			.28	.30				.08				.07		.74	.63		2.89
Omer	Lake Huron																															
Onaway	Cheboygan																															
Owosso	Saginaw	.28						.38					.15		.06			.02	.78				.18	.04			.12		.32	.60		2.93
Petoskey	Lake Michigan							.08				.02			.10	T.			.01			.21	.90				.20					1.52
Plymouth	Rouge	.17	T.												.55			.05	.33				.41						T.	.88		2.39
Pontiac	Clinton	.20	T.					.23					.34		.14			.03	.08				.05							1.14		2.21
Port Austin	Lake Huron	.10						.15					.08		.35				.28				.09	.12								1.17
Port Huron	St. Clair	.45	.02				T.	.12	T.				.74		.26			.42	.05			.02	.04	T.			T.		.95	.03		3.10
Reed City	Muskegon												.02	.03	.13				.15				.26				.12		.04			0.75
Roscommon	Au Sable											.02	.30		.22				.15				.36		.18		.05					1.28
Saginaw	Saginaw	.20	T.					.27					.65		.20			T.	.85	.05			.04	.04	.04		.06	T.	T.	.40		2.80
Saginaw West Side	do	.20	T.					.23					.66		.11	T.		.05	.90	.01			.06	T.	T.		.08	T.	.11	.31		2.72
St. James	Lake Michigan			T.			.03					.02			.32							.45	.33	.10			.32					1.57
St. Joseph	St. Joseph	.20	.04				.30	.07							.02			.60	.06			T.					T.		.75	.80		2.84
Sandusky	Lake Huron	.06											.22		1.20				.52	.21			.12	.22			.04		.52	.12		3.23
Saranac	Grand	.05						.21					.15		.26			.03	.60				.16		.10				.70	.31		2.57
South Haven	Lake Michigan	T.						.60																	.40		.60		1.60			3.20
Stanton	Grand	.03						.01						.03				.20						.06						.12		
Thornville	Saginaw	.36											.42		.88				T.										.15	.88		2.69
Traverse City	Lake Michigan												.10		.10				.40													0.60
Vassar	Lake Huron	.20						.22					.65		.28				.87				T.							.67		2.89
Wasepi	St. Joseph	.30	.12					.30					.12		.18			.32	.26				.22				.01		.38	1.04		3.31
West Branch	Lake Huron	T.						.28	T.	T.			.10		.28				T.				T.	.20			.18		T.			1.04
Woodlawn	Au Sable			T.				T.		.06		.29			.22				.40			T.	.65									1.62
Ypsilanti	Huron	.24	T.					.16						.01	.14			.45	.17	T.			.76				.02		.13	.65		2.73
Ohio.																																
Akron‖	Lake Erie	.02	.62	.57				.45	T.		T.			.21	.16	1.13		.12	.52	.01			.03	.02		.02	T.	T.		.96	.76	5.60
Antwerp	Maumee	.41	T.				.27	T.					.50					.62				.45					.10			.40		2.75
Benton Ridge	do	.15	.50					.35	T.		.02		T.	.35	.62			.70	.01				T.				T.		.29	.49		3.48
Bowling Green	Lake Erie	.27	.18					.18					.46		.03			.60	.08				T.				.08		.10	.33		2.31
Bucyrus‖	Sandusky		.40	.50				.12						.05	.05	.25		.04	.45				.02	.02			.02	.01		.25	.50	2.68
Cleveland (1)	Lake Erie	.19	.87					.27		T.	.02		.03		.84	.09		.09	.02	T.		.06	.06				.02		.29	.83		3.68
Cleveland (2)	do	.20	1.05				T.	.64			T.		.03		1.49	.08		.05				.15	.15				T.		.21	.95		5.00
Conneaut	do	.42	.39	.04				.58					.22	T.	.21	.88		T.	.13				.29	.22						1.00		4.38
Findlay‖	Maumee		.52	.40				.57	T.					.30	.07	.08		.10	.79	.04			T.	T.			.03	.10		.43	.51	3.94
Fremont	Sandusky		.72										.57		.40			.65									.02			.62		2.98
Hedges	Maumee	.27	.19					.19					.53					.55					.10						.11	1.13		3.07
Hillhouse	Lake Erie	.05	.85	T.				.50					.04	T.	.43	.75		.10	.05	T.			.05	T.			T.			1.18	T.	4.00
Hiram	do	.07	.55					.15					.18		.04	.65		.29	T.				.08		.02		T.			1.37	.08	3.48
Hudson	do	.10	1.60	.30				.62					.20	.15	.35	1.17		.20	.32	.10			.12	.02			.05		.02	1.40	.26	6.98
Lima	Maumee	.24	.55	T.				.30						.37				.75		T.				.05			T.		.13	.97	.10	3.46

TABLE 2.—*Daily precipitation for April, 1912. District No. 4*—Continued.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total.
Ohio—Continued.																																
Medina	Lake Erie	T.	1.00					.76	T.				.33		.22	.90		.35						.10	T.	T.			1.70		5.36
Montpelier	Maumee	.04					.40						.05		.32		.74		.08			.20				.03			.25		2.11
Napoleon	do	.15	.01					.18					.25	.10	.11			.45	.02				.08			.09		.06	.75		2.25
New Bremen	do		.95					T.						.03	.02		T.	.55	T.					T.		.10		.50	.75		2.90
North Royalton	Lake Erie	.08	.60					1.35							.34	1.35		.20					.30						1.33	.34	5.95
Norwalk‖	do		.60	.60				.22						.53	.23	.28			.60					.01		T.			.73	.57	4.37
Oberlin	do	.06	1.10	.02					.28				.30	.03	.21	.70		.29		.02			.30				.02	T.	1.32	.08	4.79
Ottawa	Maumee		.65					.26					.36	.20	.02			.65	.04				.08		T.		T.		.28	.38		2.92
Sandusky	Lake Erie	.21	.34				.04	.15	T.	T.	.01		.05	.01	.37			.48	.04				T.				.01		.28	.44		2.43
Tiffin	Sandusky	.13	1.21	T.		T.		.24	T.		T.		.78	.06	.44	T.		.85	T.				.03				.11		.15	1.02	.01	5.03
Toledo	Maumee	.31	T.				.04	.21	T.	T.			.06	.01	.20			.75	.03			.31	.05				.02		.12	.61		2.72
Upper Sandusky	Sandusky	.05	.93	T.				.10	T.		T.		.30	.15	T.	.28		1.05	T.				T.				.10		T.	.80	.14	3.90
Vickery	Lake Erie	.25	.58					.20					.25	.03	.67			.75	.01										.12	.54	.08	3.48
Wauseon‖	Maumee	T.	.19	T.				.21	T.	T.			.02	.01	.06				.50	.09			.18				.04	.07		.16	.29	1.82
Willoughby‖	Lake Erie																															
Pennsylvania.																																
Erie	Lake Erie	.32	.49	T.	T.		T.	.64			.01	T.	.46	T.	.62	.29		.16	T.	.01			.22		.01		T.		.20	.79		4.22
New York.																																
Adams Center	Lake Ontario	.20	.10					.44	.20	.50		.10				.11			.13	.43			.42	.20			.04			.12		2.99
Altmar	do																															
Angelica	Genesee	.22	.95	.07	.02			.34			.05	T.	.50			.26				T.			.53	.03	.13				1.36	.02	4.48
Appleton	Lake Ontario	.20	.15		T.			.55	T.	.17		.13	.06		.32	.55			.11				.43	.10	.15		T.		.08		3.00
Auburn	Oswego	.32	.42	T.				.80	.06	.38		.22	T.			.26			.14	.45			.62	.08	.18		.03		.72		4.68
Avon	Genesee	.26	.11	.05				.13		.23						T.		T.	T.				.33	T.	.07		T.		.43		1.61
Blue Mountain Lake	Raquette																															
Boonville	Black																															
Brockport	Lake Ontario	.30	.32	.10				.36	.01	.40	.02	.14	.08		.07	.17			.03	.01			.44	.03	.23		T.		.31	.02	3.04
Buffalo	Lake Erie	.49	.31	T.	.02			.55	T.	.03		T.	.06		.63	.23		.04	.03	.01			.37	.08	.09		T.		.01	.44		3.39
Canton	Grass	.40	.02	.06		.02		.47	T.	.04					.06	.20			.38	.10			.25	.29	.16		T.	.01				2.46
Cape Vincent ‖	St. Lawrence		.20						.91		.40				.05	.07	.53		.18	.04				.65	.12	.05	.07					3.27
Carvers Falls	L. Champlain																															
Castile	Genesee																															
Chazy	Champlain		.40					T.							T.	.10			.30	.25				.48	.05							1.58
Dannemora	do	.12	.56	.26		.10		.03	.02					T.	.03	.19		T.	.40	.10	T.		.01	.38		.09						2.29
Elba	Lake Ontario	.30	.30		T.			.25	.60	.20		.15			T.	T.			T.	T.			.21	.30	.28				.30			2.89
Faust	Raquette																															
Fayetteville	Oswego	.24	.61	.27				.72	.08	.21	.06	.09	.23		.04	.06		T.	.06	.33			.28	.20	.17		T.	T.		.43	.11	4.19
Gabriels	St. Regis	.20	.30	.30		.20		.25	.20	T.	.20					.20	.10		.35	.35			.20	.35		.10						3.30
Harkness	L. Champlain	.13	.60	.31		.17		.07							.04	.05			.27	.08			.25	.21	.06	.01						2.25
Hooker	Lake Ontario																															
Horseshoe	St. Lawrence																															
Hunt	Genesee	.43	.60					.53					.22			.26							.36						1.24		3.64
Ithaca	Oswego	.24	.94	.15				.22	.12	.09	T.	.02	.05	.12	T.	.11		.03	.04	.06			.12	T.	.07				.59		2.97
Keene Valley	Ausable	T.	.31	.58				.12	.06	.42					.03	.22			.09	.04			.29	.11	.07							2.34
King Ferry	Oswego	T.	.58	.08				.44		.13		.08	.07			.14			.34				.32	.02					.55			2.75
Lake George	L. Champlain	.12	.52	.02		.12		.11		.21	.04				.07	.16			.36	.63			.38	.64				.06		.04		3.48
Lake Placid Club	Ausable, W. Br.		.37	.51		.25			.30	.25	.10				.12	.09	.05		.24	.15	.10		.44	.10	.15	.11						3.33
Leisers Mills	Black																															
Lockport	Lake Ontario	.28	.05		.13			.68	T.	.13		.11	.08		.34	.24			.10	T.			.26	.19	.13				.25		2.97
Moira	St. Lawrence	.40	.50	.20				.35							T.	.06			.50	.24			.08	.52	.32	T.		T.				3.17
Nehasane	Black	.14	.32	.31		.06		.55	.12	.35	.05				.06	.33	T.		.19	.25	T.		.42	.42	.19	T.	T.	.03				3.79
North Lake	do	.28	.10	.31				.41	.07	.17	.18	.04			.16	.64	.18		.21				.61		.12			.13		.17		3.68
North Osceola	Lake Ontario																															
Ogdensburg	St. Lawrence							.90		T.						.22			T.				.60		.64							2.36
Old Forge	Black																															
Oswego	Lake Ontario	.30	.05		T.	T.		.69	.01	.24		.06			.10	.10			.36	.05			.52	.02	.16		.01	T.		.25		2.92
Otto	Lake Erie	.19		.44				.32	T.			T.	.47			.28		T.	.04	T.	.64	.09	.06						1.75		4.28
Palermo	Lake Ontario																															
Perry City	Oswego	.10	.84	.29				.40	.07	.08		T.	.18			.25			.24	.10			.08	.02	.03		.15			.71	.08	3.62
Philadelphia	St. Lawrence	.23	.26	.07				.67	T.	.17	.11				.06	.17	.06		.14	.63			.28	.58	.08							3.51
Potsdam	Raquette	.34	.39			.02			.41							.22			.13	.29			.08	.40		.19						2.47
Raquette Lake	do	T.	.29	.70				.31	.34	.50	.19					.59			.35	.24	.06		.54	.03	.69			.06				4.89
Rochester	Genesee	.47	.28					.39	.04	.46		.15	.06		.01	.18			T.	.03			.57	.08	.19		.02		.34			3.27
Romulus	Oswego	.04	.50	.40				.08	.10	.10		T.	T.		T.				T.				.40	.08	.04		.08		.43			2.25
Shortsville	do	.39		.18				.22	.04	.32		.18	.06			.10			.07				.34	.03	.16		.01		.40	.13		2.63
Skeneateles	do	.14	.56	.32		T.		.55	.52	.30	.04	.20	.09	.04	.03	.28	T.	T.	.10	.52	T.		.57	.18	.12		T.	T.		.40	.06	5.02
Syracuse	do	.53	.42	.09		.01		.47	.10	.35		.08	.13		.02	.10		T.	.30	.05			.35	.02	.06		T.			.57	.01	3.66
Ticonderoga	L. Champlain																															
Tupper Lake	Raquette	.15	.10	.40		.30		.05	.20	.40					.06	.23			.15	.40			.65	.22	.03							3.34
Volusia	Lake Erie	.05	.63	.15				.86				T.		.40	.02	.64		T.	.20	T.			.36	.12	T.				.72			4.15
Wanakena	Oswegatchie	T.	.24	.30					.12	.19					.01		.05		.18	.34			.47	.31	.12	.18		.02				2.53
Wards Creek	Raquette																															
Watertown	Black																															
Wedgewood	Oswego	.26	1.20	.16				.45	.04	.01	T.	.01	.35			.15			T.	.18			.30	.03	.14		.01			.92	.06	4.24
Westfield	Lake Erie	.62	.41					.61	.02				.39		.06	.39		.14	.21	.09			.66	.21	T.				T.	.49		4.30
Yorke	Lake Ontario	.33	.35		T.	T.		.36	.11	.12	T.	.02	.06		.03	.01			T.	.01			.51	.06	.09		.03			.47		2.56
Youngstown	do		.15	.27				.38		.29		.07			.33	.62							.32	.04	.05		.07			.12		2.71
Vermont.																																
Burlington	L. Champlain	.16	.38	.12		.03		.61	T.	T.					.01	.15			.30	.29			.62	.26	.04		T.					2.97
Cornwall	do		.14	.40	.05				T.	.10					.15	T.			.30	.51			.05	.40	.20							2.30
Enosburg Falls	do	.08	.24	.20			T.	.58	.32	T.					.02	.20			.26	.34	.06		.10	1.27	.07	.02						3.76
Northfield	do	.09	.22	.09		.08		.27	T.	.03					.11	.11	T.		.25	.27			.19	.06	.05	.09		.04				1.95
Wells	do		.56	.43		.15		.41	.27	.27					.10	.15			.19	.66				.27	.09	.03		.03		T.	.11	3.72

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures for April, 1912. District No. 4, Lake Region.*

Date.	Duluth, Minn.		Wisconsin.						Chicago, Ill.		Fort Wayne, Ind.		Upper Michigan.										Lower Michigan.					
			Florence.		Green Bay.		Milwaukee.						Escanaba.		Ewen.		Houghton.		Marquette.		Sault Ste. Marie.		Alpena.		Battle Creek.		Cadillac.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	48	21	45	16	42	26	36	30	37	32	50	34	34	14	47	12	42	17	48	16	36	10	31	16	34	31	40	18
2....	40	27	42	21	36	23	43	30	42	31	39	28	35	21	40	13	36	18	36	22	34	20	34	22	43	29	36	24
3....	55	30	46	17	50	23	49	30	51	32	46	25	38	18	48	19	35	17	38	19	33	12	36	15	46	23	38	15
4....	65	31	68	30	65	38	70	41	73	42	67	36	50	32	67	35	61	27	65	35	46	28	55	28	68	32	53	33
5....	74	47	72	49	66	48	71	50	73	53	72	52	49	36	72	48	67	40	74	50	56	35	68	37	71	47	58	41
6....	51	30	63	43	67	36	70	42	69	46	73	50	54	31	60	40	56	24	64	26	55	37	67	35	73	53	62	38
7....	43	22	44	21	41	28	44	31	47	36	51	33	35	24	50	20	31	20	33	22	37	22	49	25	68	32	49	24
8....	36	28	45	19	47	32	60	35	60	40	56	32	34	23	50	17	34	18	35	20	30	19	41	21	55	30	43	21
9....	58	25	47	25	60	33	66	36	68	42	67	41	44	27	60	24	42	28	38	28	33	25	47	29	64	40	56	33
10....	44	32	63	24	60	30	56	34	58	39	62	40	39	26	66	25	46	22	57	28	42	28	42	31	61	32	55	23
11....	44	31	58	33	48	39	69	40	73	51	72	45	49	32	58	26	47	29	43	31	49	33	46	33	72	43	65	40
12....	38	28	51	34	44	33	47	38	61	42	78	45	44	29	47	33	36	26	39	29	50	27	46	34	70	46	55	36
13....	39	27	53	26	52	31	47	37	54	42	50	42	45	28	57	26	43	26	43	26	45	26	41	32	57	43	55	31
14....	39	31	43	34	46	34	73	39	75	45	74	43	38	34	52	34	37	34	42	34	40	36	40	34	73	46	58	37
15....	41	31	53	34	58	36	57	48	62	49	77	52	53	34	48	36	43	33	49	32	60	32	69	37	71	51	68	48
16....	34	29	40	28	46	33	48	33	50	37	61	44	38	28	45	30	36	29	34	27	32	28	48	29	58	40	56	30
17....	38	26	43	23	40	30	35	31	37	35	47	35	39	26	42	20	39	25	35	27	42	25	40	28	49	33	49	24
18....	42	26	43	27	45	33	42	29	42	32	41	32	39	30	48	25	41	27	39	30	40	29	39	33	37	34	41	30
19....	46	34	52	22	54	30	49	32	45	37	52	30	45	27	52	19	49	27	37	29	33	26	44	26	51	29	43	21
20....	61	33	61	25	59	34	47	37	51	40	60	40	50	31	58	21	60	27	64	34	59	22	49	27	59	44	58	26
21....	37	28	53	32	55	40	60	40	66	44	68	41	44	35	61	23	38	33	44	32	51	31	45	34	69	30	57	34
22....	50	25	43	30	50	38	53	39	58	42	60	38	44	32	52	26	41	30	45	31	43	32	51	35	63	37	53	31
23....	60	36	59	31	65	34	65	37	64	38	60	33	54	31	55	33	54	28	51	35	56	29	54	31	58	31	54	32
24....	60	32	55	35	59	39	60	44	57	46	60	47	54	40	54	36	55	37	50	39	43	30	55	37	58	47	52	37
25....	49	36	61	33	60	40	59	45	68	46	67	39	49	40	63	38	61	40	61	42	62	29	57	34	68	32	60	34
26....	51	31	56	38	65	43	71	46	74	50	64	55	59	38	58	35	59	29	59	32	57	33	69	42	66	48	66	46
27....	41	26	48	26	50	34	47	36	50	39	58	42	43	29	50	26	37	24	32	25	33	24	48	29	66	41	58	33
28....	51	31	53	29	46	34	40	37	45	38	46	38	42	32	50	28	58	31	51	28	41	22	38	26	52	38	44	26
29....	42	33	53	28	53	38	47	37	43	38	45	42	48	33	55	35	44	35	40	34	50	29	49	34	50	39	58	33
30....	44	32	59	25	58	32	49	37	52	41	60	40	49	34	63	22	47	30	43	34	55	32	54	36	61	47	62	31
Mns..	47.4	30.0	52.4	28.6	52.9	34.1	54.3	37.4	56.8	40.8	59.4	39.8	44.5	29.8	54.3	27.5	45.8	27.7	46.3	29.9	44.8	27.0	48.4	30.3	59.7	38.3	53.4	31.0

Date.	Lower Michigan.						Ohio.								Erie, Pa.		New York.								Vermont.			
	Detroit.		Muskegon.		Saginaw, West Side.		Cleveland.		Lima.		Sandusky.		Toledo.				Buffalo.		Canton.		Rochester.		Syracuse.		Burlington.		Northfield.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	35	29	34	27	34	26	53	32	57	35	37	32	38	31	42	30	40	30	27	17	39	26	42	25	30	18	33	18
2....	36	30	37	24	35	27	32	29	45	30	32	29	37	31	31	28	32	27	29	22	32	28	34	26	31	22	39	27
3....	39	26	37	20	40	20	35	22	40	19	39	22	45	26	32	26	30	20	29	19	31	22	30	22	27	21	31	21
4....	59	34	58	35	61	34	59	35	63	32	61	34	63	35	56	32	49	26	40	16	46	23	42	20	35	19	35	20
5....	67	46	61	37	69	49	70	54	71	50	70	52	71	50	70	55	58	40	55	40	66	46	68	42	59	31	63	21
6....	67	48	63	50	73	51	73	54	74	51	74	52	73	52	73	58	67	42	68	45	77	53	75	55	66	47	64	34
7....	57	29	57	30	67	30	65	31	64	28	62	32	62	31	67	29	65	28	66	22	65	29	65	27	68	30	64	32
8....	48	29	50	33	46	26	42	31	65	29	47	31	53	31	36	27	33	24	31	21	34	23	30	24	30	23	32	19
9....	66	38	56	40	64	37	65	40	61	39	66	40	68	41	64	35	42	29	34	23	53	28	42	25	36	22	31	18
10....	52	36	61	45	55	30	43	33	60	41	44	34	59	36	45	32	38	30	42	20	42	31	39	28	43	24	42	18
11....	71	38	62	38	68	45	68	38	73	42	70	42	74	44	61	36	48	30	43	28	46	33	38	32	49	33	45	31
12....	55	40	64	43	48	38	65	40	76	51	65	38	57	40	54	35	51	37	51	29	45	32	44	33	50	29	49	26
13....	51	40	60	38	56	34	57	38	74	50	41	37	42	37	44	34	51	34	45	30	45	34	56	31	41	27	50	24
14....	69	42	68	46	64	43	76	56	70	44	75	38	73	39	65	37	61	40	58	28	64	38	62	40	46	27	44	25
15....	75	52	64	48	71	50	77	50	78	65	78	54	78	54	73	54	73	48	69	55	80	55	70	55	61	46	52	38
16....	60	35	51	41	56	44	52	41	69	48	57	42	64	41	55	43	54	37	63	40	64	39	67	42	72	45	71	42
17....	38	33	47	30	45	32	46	34	60	35	42	35	41	33	44	35	45	33	48	34	43	33	49	34	48	36	50	38
18....	42	35	41	33	37	33	52	36	44	36	44	37	42	36	56	37	52	34	58	35	60	39	64	41	48	34	43	32
19....	50	32	44	34	50	29	45	36	54	30	50	34	53	33	42	34	37	31	42	32	45	33	41	34	44	35	44	34
20....	56	35	54	29	59	30	49	39	61	39	53	42	56	40	46	34	45	31	50	27	47	29	51	30	52	29	52	28
21....	61	40	66	42	66	40	70	44	68	52	71	42	68	43	64	40	66	38	63	33	64	34	62	35	63	32	62	25
22....	59	37	59	36	60	36	64	40	63	41	64	40	63	39	68	36	62	36	63	51	69	44	61	50	59	49	56	35
23....	57	33	54	34	58	33	53	38	60	40	58	35	60	34	49	35	49	29	52	31	48	30	50	30	53	33	54	32
24....	58	46	52	42	57	46	56	45	65	29	61	48	61	48	53	42	52	35	55	28	58	39	59	36	45	35	50	30
25....	60	41	68	35	66	34	59	41	68	33	55	42	64	44	54	39	56	36	59	32	58	36	56	34	58	36	55	33
26....	64	46	67	52	72	47	66	53	60	55	67	53	64	53	64	53	62	48	68	36	65	48	64	44	64	38	64	28
27....	56	36	52	40	66	40	62	39	60	47	59	40	59	40	62	37	55	32	60	32	63	33	61	34	66	32	68	36
28....	42	33	45	40	48	30	48	35	54	38	46	37	45	36	42	31	48	30	45	26	45	31	42	31	45	28	42	26
29....	46	39	59	39	47	37	49	40	48	41	44	40	45	40	46	37	45	39	52	30	43	38	41	36	48	29	51	26
30....	60	38	60	35	54	31	49	38	55	40	47	40	54	38	50	37	57	36	61	29	57	37	60	35	59	31	63	28
Mns..	55.2	37.2	55.0	37.2	56.4	36.1	56.7	39.4	62.0	40.3	56.0	39.1	57.7	39.2	53.8	37.2	50.8	33.7	50.9	30.4	53.1	34.8	52.2	34.4	49.9	31.4	50.0	28.2

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 5, UPPER MISSISSIPPI VALLEY.

GEORGE M. CHAPPEL, District Editor.

GENERAL SUMMARY.

The weather of April, 1912, in the upper Mississippi Valley was more nearly seasonable than that of any other month in the last year or more. Over much of the district the month was unusually free from marked abnormalities in weather conditions, and it will go on record as an unusually pleasant one for the time of year. This statement can hardly apply, however, to the Illinois area. There the month was characterized by a series of violent local storms, a heavy snow storm, and flood conditions. The local storms, which were of tornadic character, caused the death of many persons and wrought much damage to property, while the floods were productive of great monetary loss at some points and caused much inconvenience. Description of the tornadoes follows in separate articles. The storm that passed over parts of Newton County, Ind., late in the afternoon of the 21st was a continuation of the severe storms in Illinois on the same date. Nine persons were killed, seven being members of the family of Charles Rice, who lived a few miles west of Morocco, Ind. Several persons were slightly injured and much damage was done to property in that vicinity. On the 13th storms of tornadic character occurred near Boone and Earlham, Iowa. No human lives were lost, but damage to the extent of several thousand dollars was done to barns, outbuildings, fruit trees, etc.

The frosts of the month caused but little if any damage, owing to the backwardness of the season. In Illinois the wet weather hindered farm work materially. At the close of the month vegetation was advancing with unusual rapidity as the result of favorable moisture and temperature conditions.

The following table presents in condensed form the leading features of climatological interest for the various parts of the district:

Parts of States within district 5.	Temperature.				Precipitation.					
	Mean.	Departure.	Highest.	Lowest.	Average.	Departure.	Greatest total.	Least total.	Average snowfall.	Average number of days with precipitation.
North Dakota	43.8	+3.8	88	7	2.40	+0.92	4.10	0.90	2.4	7
Minnesota	45.8	+3.1	86	6	2.18	0.00	11.16	0.40	0.2	6
South Dakota	47.6	+2.8	83	17	5.62	+2.28	6.84	4.40	0	8
Wisconsin	45.8	+2.2	80	9	2.48	−0.27	4.89	0.79	1.4	7
Iowa	49.8	+1.3	81	20	2.56	−0.32	4.98	0.78	1.8	8
Missouri	53.9	+0.8	82	26	5.41	+1.85	11.71	2.89	1.7	9
Indiana	50.2	+2.0	79	22	3.47	+0.04	4.40	2.66	0.1	10
Illinois	52.6	+1.7	86	20	4.74	+1.31	8.60	0.69	2.9	11

TEMPERATURE.

The average temperature for the district, 309 stations reporting, was 2.0° higher than usual, or 48.1°. The monthly means were above the normal in all parts of the district, but over the southern half of it the excess in temperature did not, as a rule, exceed 1° a day. The weather was relatively warmer in the northern sections, the temperature averaging 4° or 5° above the normal in the North Dakota area and in northwestern Minnesota. The monthly means at the individual stations ranged from 59.4°, at Carbondale and Cobden, Ill., to 38.6° at Vudesare, Wis., or a difference of slightly more than 20° between the warmest and coolest parts of the district. As a rule both the highest and lowest temperatures of the month were experienced during the first decade, many stations having the extremes within two days of each other. At quite a number of stations, however, the highest and lowest temperatures did not occur till later in the month. One peculiarity of temperature conditions worthy of note was the occurrence of higher temperatures in the northern part of the district than in the southern. The maximum of 88°, at Forman, N. Dak., on the 4th was not equaled elsewhere, and thermometer readings above 80° were comparatively rare except in the North Dakota and Minesota areas. No unusually low minimum temperatures were reported; in fact, they were above average of former years in most cases. Over large areas the lowest temperature for the month was only slightly below the freezing point and comparatively few stations recorded temperatures less than 20°. The lowest reported was 6°, at Itasca State Park, Minn., on the 1st.

PRECIPITATION.

The 336 stations that reported show an average precipitation of 3.02 inches, which is about one-third of an inch above the normal. Geographically considered the distribution was somewhat more irregular than usual. Generally speaking the amounts were much heavier over the southern third of the district than elsewhere. Over much of central and southern Illinois and the Missouri area the precipitation exceeded 5 inches, and it was one of the wettest, if not the wettest, April in many years. The greatest monthly amount, 11.71 inches, occurred at Warrenton, Mo., while three stations in southern Illinois reported more than 8 inches. The average fall over the northern two-thirds of the district was about 2.50 inches, but some stations reported more than 4 inches. At Fosston, Minn., the amount was 11.16 inches. Only a few stations had less than 1 inch, the least monthly amount being 0.40 inch, at Fort Ripley, Minn.

Precipitation occurred with marked regularity throughout the month. Seven distinct periods can be traced in southern sections. The fall was heavier in the latter

half of the month than in the first half. Twelve stations, 8 of which are in Illinois, reported 2.50 inches or more in a 24-hour period.

Snowfall.—One of the heaviest April snowstorms on record for eastern Iowa, northern Illinois, and southern Wisconsin prevailed on the 17th and 18th. Upward of 12 inches fell over some areas and the snow was so wet and heavy that considerable damage was caused. Limbs were broken off trees, and telephone and telegraph companies suffered. The average snowfall for the district was 1.6 inches, and the greatest monthly amount, 14.5 inches, occurred at Galva in northern Illinois.

MISCELLANEOUS.

The prevailing wind direction was southwesterly, but in the Northern States it was northwesterly. The highest velocity was 48 miles an hour from the south, at Springfield, Ill., on the 25th in connection with a wind storm that caused about $25,000 damage at that place. This equals the highest previous velocity at that station.

The percentage of the possible amount of sunshine was above the normal by about 5 per cent, the average being about 65 per cent. There was remarkable uniformity in the number of clear, partly cloudy, and cloudy days in the various parts of the district, the average of which was 12, 8, and 8, respectively. The average number of days with 0.01 inch or more precipitation was eight.

RIVERS.

High stages prevailed in most of the rivers and streams in the southern part of the district all the month. The Mississippi River was above flood stage early in the month from Keokuk, Iowa, southward. At Hannibal, Mo., the flood stage lasted to April 16, and the stage reached, 19 feet, is the highest since June, 1903. But little damage resulted at that point. The flood at Cairo, Ill., will be fully described in a special bulletin to be issued later by the Weather Bureau. Flood stages were not reached in the Mississippi River from the Davenport district northward. At the close of the month the gage readings in that district were from 2 to 5 feet lower than those reached at the time of the crest of the rise early in the month. On the 3d and 4th the ice in the Mississippi at Dubuque, Iowa, gorged at the Dubuque drawbridge, necessitating the use of dynamite. On the 3d the sheer boom was carried down stream, but lodged on the east side of the river and was recovered. The Illinois River at La Salle and Beardstown, Ill., was above flood stage throughout the month, but no damage was reported. The improved stage of water in the rivers of Minnesota was of benefit in supplying the mills with logs.

TORNADIC STORMS IN ILLINOIS.

By CLARENCE J. ROOT, Section Director.

In the late afternoon of April 21 severe and destructive tornadic storms occurred at a number of places in Illinois. There were two principal storm areas, one in the northeast part of the State and another in the south end. The distance between these two areas is about 225 miles. The reports received at this office from authentic sources place the number of dead at 18, but it is probable that all deaths have not been reported. The newspaper estimates were too high. A great many persons were injured and hundreds were rendered homeless. The property loss is probably near a million dollars The northern storm area covers the region extending from Lasalle and Livingston counties eastward into Indiana An effort was made to trace a storm track, but the times given for the reports, together with the fact that so wide an area was covered, would seem to indicate that there were a number of storms operating at the same time. Reports were received from eleven parties in this district. They all agree that the storm moved in a direction north of east, that the cloud had a funnel-shaped pendant, that the storm was accompanied by rain and hail, and that there was a loud, roaring noise. The width of the paths was given from 100 feet to 1,300 feet. Some observers state that the trees fell in all directions, while others claim that they lay to the east. The losses reported are as follows: Grundy county, $100,000; Kankakee county, $300,000; Dwight, $25,000; Martinton, $10,000; Chatsworth, $40,000. Two lives were lost in Kankakee County (Mrs. D. W. Jay and Mrs. Robert Hawkins) and three near Campus (Wilson Hulse, wife, and baby). Mr. E. G. Cryder, cooperative observer, Morris, Ill., says: "I viewed the path of this storm and the destruction was very severe. Some of the farms did not have a building left. At one place it pulled up 40 rods of wire fence. Did not leave a post standing." Mr. E. O. Welch, cooperative observer at Dwight, Ill., reports as follows: "There was no marked indication of the approaching storm at 3 p. m., but shortly after thunder was heard in the southwest increasing in volume, and at 4.10 rain began falling in a spasmodic sort of a way, with some hail. At 4.30 heavy rain was falling accompanied by large hailstones, weighing from 4 to 6 ounces, of a flat appearance and seemed to be formed by the freezing together of 10 or more smaller ones. At this time a black cloud was seen in the southwest about 2 miles from town, and it is said by those who saw it at this time to have had a funnel-shaped pendant. When I saw it myself three or four minutes later it resembled a huge column reaching from the earth to the clouds which hung very low, and appeared to be about 50 feet in diameter and was moving east-northeast, making a path about 80 rods wide. Much damage was done 2 miles south, and 3 miles southeast, two houses were entirely destroyed, a number of others badly damaged, together with outhouses and corncribs and some stock. Loss probably $25,000 or $30,000. Sixty-four hundredths of an inch of rain fell, most of it in about 20 minutes. At 4.50 p. m. the sun was shining. No loss of life in this immediate vicinity." The storm in Dewitt County is reported by J. F. Ziegler, cooperative observer: "The greatest damage was done near Salt Creek south of Clinton, but the storm seemed to raise and strike at times in different places.' It was first reported near Rowel, 4 miles southwest of the above-mentioned place, but no great damage was done there, then at Clinton, and lastly 2 miles farther northeast, where it destroyed a building within 100 feet of my instrument shelter. The storm here (at the last place) was not as strong, or perhaps there was less in its path to show its strength."

TORNADO AT MURPHYSBORO AND BUSH, ILL., APRIL 21, 1912.

By Prof. F. H. COLYER, Cooperative Observer, Carbondale, Ill.

The storm, as a destructive one, started 3 miles north of Murphysboro, Ill., and moved slightly northeastward, about 15° to 20° north of east. In this track the funnel cloud zigzagged more or less. From reports and actual visitation I could trace the storm path something

more than 30 miles—from 3 miles north of Murphysboro to Dale, in Hamilton County. Almost all the way along the track it was destructive. In a few places the funnel cloud lifted only to lower again with increased violence. The greatest loss of life and property was at Bush, Ill., so I made this my chief place of investigation. I actually followed the track of the storm from De Soto to 1 mile beyond Bush, a distance of about 7 miles.

The storm struck Murphysboro at 6 p. m., Sunday, April 21, and it struck Bush at 6.15 p. m., thus covering 14 miles in about 15 minutes. The evidences on this point were gathered from clocks that were stopped at this hour and from several people who were just out of the danger zone and noticed the time by their watches. The destructive part of the storm did not average more than one-fourth of a mile in width, but because of shifting somewhat it was in some places wider and in others narrower.

Fully 90 per cent of the trees blown over lay to the northeast, but there were places where they lay to the southeast. In one place, where the track was the narrowest, the northeast and southeast trees had their tops touching. On the south side of the track the trees were almost invariably thrown east or northeast, while on the north edge many houses and quite a number of trees were thrown southeast.

The cloud was described by many eyewitnesses, and they were nearly a unit in saying it looked like a heavy, dark, whirling column of smoke, rising from a huge locomotive. The dark and heavy surrounding clouds were noted by many observers. Several persons who stood just outside the danger zone watched the funnel-shaped pendant for miles, and they assert that it seemed to gather at one place and then to scatter somewhat and gather again, and all noted a spiral-like motion of débris within the funnel. The funnel form was observed almost exclusively by persons just outside the zone of violent winds.

There were very large hailstones in the early stage of the violent part of the storm, being often as large as hen's eggs or larger. One person stated that 30 of these hailstones filled a gallon bucket, while about 40 hen's eggs are necessary to fill it. There was not a great deal of rain at the time of the storm and what did occur fell in a few minutes, but it was very heavy for the short time that it rained.

Most of those who observed the funnel-shaped pendant also noted the accompanying roaring noise, yet but few could think of any noise with which to compare it. Some compared it to the muffled roar of an onrushing train, while others said that they had never before heard any other noise just like it.

All dwellings in the town of Bush, with one or two exceptions, belong to the Western Coal & Mining Co., and as a rule they were not securely built. Most of them rested on wooden block foundations and were open underneath. So far as I could observe no storm sheathing was used; and as a result only 25 of the 148 dwellings were uninjured, and these were outside the path of the storm. Twenty-two houses were completely destroyed, 63 partially so, while 43 were slightly damaged. In most cases patches of roof were torn off or the houses were moved off their foundation, otherwise not being seriously injured. The company estimates its loss at not less than $100,000 and the loss to the occupants of the houses at $25,000. The railroad roundhouse was destroyed; the section foreman's house was a complete wreck; and cars were damaged, entailing a loss of not less than $25,000 additional, making a total loss of $150,000, based upon the estimate of two officers of the coal company. The loss to farm property between Murphysboro and Bush, including houses, barns, and other buildings, stock, and fencing, amounts to $50,000. About 25 farmers sustained severe losses, while minor losses occurred on other farms. In some cases both house and barn were destroyed, while in others only the house or the barn was seriously damaged.

The death list totals 9, while 75 were injured.

A second tornado occurred at Willisville, 26 miles north of Murphysboro, on the same day, resulting in the death of three persons, and a third storm of like character occurred 6 miles north of Murphysboro the same evening. No details of these can be given.

TORNADO NEAR CARBONDALE, ILL.

By Prof. F. H. COLYER, Cooperative Observer, Carbondale, Ill.

So far as I can find out the storm began about 4 miles west of Carbondale and extended about 28 miles almost due east into Williamson County. It was most destructive in and near Carbondale. It has been impossible for me to find out just how far east the storm extended as a destructive wind.

The storm occurred in Carbondale at 1.45 p. m., Friday, April 26. The exact time it occurred at other places along the line I can not find out, but here in Carbondale we had over 700 students in the normal school and many of us looked at our watches and at the clocks, so we knew the exact time.

The general direction of the whole storm was almost due east, but winds both from northwest and southwest met along a narrow belt, where the storm was most destructive. The evidences of these lateral winds from the northwest and southwest are very clear. In the first place all buildings and trees thrown down on the north side of the line of meeting of these winds are lying to the southeast, while all buildings and trees on the south side of this line are thrown to the northeast. In the second place, I watched the clouds, and there evidently were two sets of clouds that met along an east and west line. The meeting of these was seen by a number of persons.

The width of the destructive area varies considerably owing to the degrees of violence of the lateral winds. As a rule the most destructive track was not over 400 or 500 feet wide, but barns were blown down over a much wider area; but these were destroyed by the force of the lateral winds, which came in with great violence.

For an hour or so previous to the storm a mass of deep black clouds lay to the north. A short time before the storm a heavy mass of clouds rose in the west and southwest from which came quick, short, and deep thunder. Directly in front of these last-named cloud masses there quickly developed what appeared to be a severe thunder squall, with clouds moving rapidly from the northwest and southwest. At their meeting the clouds appeared to roll and boil, and after a few quick but deep peals of thunder the storm struck us. It grew so dark, and flying obstacles so obscured everything that nothing more could be distinctly seen till the worst of the storm was over. I looked for the funnel cloud, but could see none.

Almost at the same instant that the furious wind struck us very large hailstones fell, but the hail lasted only a short time, giving place to rain. It rained hard for a short time only. For the 24 hours previous to the violent storm we had 3 inches of rainfall from a series of thunderstorms.

My thermograph, which was within one block of the storm center, showed a rapid drop in temperature—from 72° to 58.°5 at the time the storm raged most violently. The relative humidity just as abruptly rose from 83 per cent to 90 per cent. The barograph also instantly dropped 0.25 inch, then as quickly rose again to 29.55 inches, or the point indicated before the storm. The barograph showed a rather unstable condition for the 24 hours prior to the storm.

Several persons, whose judgment and general intelligence are quite dependable, state that they heard constant reports resembling the cracking of a whip, and in some instances as loud as pistol shots, which seemed to be electrical discharges between tree tops and buildings on the one hand and the clouds or air above on the other. These phenomena did not occur in the direct storm track, but a little to one side. The only reports I have are from the north side of the storm. Later these same reports were attested in the storm center. A roaring noise accompanied the storm particularly when it grew so dark.

Sixteen barns and two houses were entirely destroyed and five houses were seriously damaged. In addition the loss on outbuildings, fences, etc., would make the total loss not less than $15,000.

Only one person was killed, Mrs. Weller, but three others had serious cuts and bruises.

TABLE 1.—*Climatological data for April, 1912. District No. 5, Upper Mississippi Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
North Dakota.																				
Amenia	Cass	954	15	45.8	+ 4.0	84	4	20	2†	56	2.95	+ 0.82	1.40	T.	3	19	4	7	nw.	C. E. Wood.
Bottineau	Bottineau	1,638	17	42.8	+ 3.7	74	3†	18	21	46	1.36	+ 0.88	0.40	11.0	9	12	8	10	nw.	W. M. Mills.
Bowbells	Burke	1,958	.....	42.7	.....	78	10	9[a]	17	46[a]	2.05	.....	0.74	5.5	9	20	0	10	.....	G. H. Phelps.
Cando	Towner	1,488	11	43.8	+ 5.1	75	3	20	16	48	2.78	+ 2.18	0.72	.....	7	19	6	5	n.	E. T. Judd.
Crosby	Divide	.....	6	47.6	.....	82	4†	20	2†	56	1.32	.....	0.72	0	4	17	10	3	.....	H. C. Kaschau.
Devils Lake	Ramsey	1,482	7	42.8	+ 4.6	75	4	21	16	43	2.41	+ 0.38	0.87	1.2	11	10	13	7	ne.	U. S. Weather Bureau.
Donnybrook	Ward	1,760	13	42.2	+ 3.9	75	9	8	16	42	2.43	+ 1.74	1.04	6.5	8	14	8	8	nw.	C. J. DeVore.
Dunseith	Rolette	.....	15	42.6	+ 2.5	71	4	19	16	41	2.14	+ 1.49	0.68	.....	8	11	12	7	nw.	C. E. Goodsell.
Edmore	Ramsey	1,524	7	43.0	.....	77	4	16	27	38	1.71	.....	0.40	0	9	16	11	3	ne.	H. R. Aslakson.
Fessenden	Wells	1,610	.....	43.8	.....	76	4	20	7	47	2.37	.....	0.52	T.	8	18	5	7	ne.	G. T. Seymour.
Forman	Sargent	1,249	18	50.2	+ 7.1	85	4	19[d]	7	54[d]	2.82	+ 0.47	2.20	0	5	18	5	7	nw.	A. Maltby.
Grafton	Walsh	827	21	42.2	+ 3.0	80	4	18	2†	57	2.05	+ 0.57	0.68	0.5	10	12	11	7	w.	A. R. T. Wylie.
Granville	McHenry	1,504	6	41.8	.....	75	4†	15	16	48	2.15	.....	1.09	0.6	7	9	9	12	nw.	W. A. Christianson.
Hannah	Cavalier	1,568	7	38.8	.....	74[b]	4	14[b]	27	44[b]	2.18	.....	0.90	12.0	7	.....	.....	.....	nw.	J. Moffatt.
Hansboro	Towner	.....	4	41.0	.....	76	4	15	16	45	2.79	.....	1.00	5.5	7	17	8	5	nw.	Geo. Dale.
Hillsboro	Traill	901	7	46.5	.....	82	4	21	7†	47	2.29	.....	1.61	T.	5	18	7	5	ne.	F. E. Mayall.
Lakota	Nelson	1,579	6	42.7	.....	74	4	19	27	42	1.87	.....	1.00	2.2	6	8	13	9	ne.	C. R. Pettes.
Langdon	Cavalier	1,615	17	39.3	.....	70	4	17	1	40	2.63	.....	0.97	.....	10	18	0	12	.....	J. Woolner.
Larimore	Grand Forks	1,134	17	42.6	+ 2.7	77	4	19	27	50	2.38	+ 0.92	0.68	T.	9	17	6	7	n.	J. M. Freeman.
Lisbon	Ransom	1,091	8	46.6	+ 6.2	86	8	18	7	62	3.93	+ 2.17	1.87	0	4	13	9	8	nw.	W. S. Adams.
McKinney	Renville	1,640	18	43.6	+ 3.2	77	3	7	16	47	2.68	+ 1.81	1.20	9.0	5	13	11	6	se.	N. P. Swenson.
McLeod	Ransom	.....	.....	45.5	.....	82	4	11	1	52	4.10	.....	2.85	0	4	9	15	6	.....	Martin Reinholt.
Manfred	Wells	1,605	11	43.6	.....	76	4	14	21	46	3.08	.....	0.92	1.0	13	15	11	4	nw.	P. B. Anderson.
Mayville	Traill	975	16	46.4	+ 3.4	81	4	20	2	49	2.22	0.50	1.56	0	5	20	2	8	nw.	W. C. Gould.
Minot	Ward	1,557	14	43.8	+ 2.4	76[a]	9	18	16	46[a]	2.47	+ 1.08	1.00	2.7	6	13	4	13	w.	W. J. Ellison.
Minto	Walsh	820	19	44.7	+ 4.2	80[a]	4	19[a]	2†	46[a]	1.86	+ 0.20	0.83	.....	7	16	6	8	n.	S. S. Marsh.
Oriska	Barnes	1,270	7	44.8	.....	82	4	20	2†	56	2.39	.....	1.51	0	5	15	11	4	n.	J. J. Taylor.
Park River	Walsh	998	9	44.1	.....	81	3	18	2	48	3.19	.....	1.10	.....	11	10	13	7	ne.	P. J. Prochaska.
Pembina	Pembina	789	14	42.6	+ 4.2	78	3	17	27	48	0.90	− 0.32	0.42	.....	7	19	2	9	e.	C. W. Shumaker.
Power	Richland	1,020	20	47.4	+ 5.6	82	9	19	1†	46	3.99	2.15	3.20	0	3	10	10	10	nw.	J. A. Power.
Pratt	McHenry	.....	7	40.5	.....	76	3	13	1	48	2.75	.....	1.35	1.0	7	23	3	4	nw.	W. B. Ahern.
Towner	do	.....	4	45.1[d]	.....	76[d]	3†	21[d]	16†	45	2.20	.....	0.68	3.0	7	13	12	5	nw.	B. Bagley.
University	Grand Forks	830	20	44.8	+ 3.2	80	4	21	27	44	1.65	− 0.59	0.84	0	7	19	8	3	n.	U. S. Weather Bureau.
Wahpeton	Richland	962	20	45.6	+ 0.9	81	8	21	7	49	2.53	+ 0.24	1.00	0	5	16	3	11	.....	E. G. Burch.
Walhalla	Pembina	960	8	43.4	.....	80	4	14	27	50	2.08	.....	0.80	8.0	6	13	12	5	n.	Ivanhoe Lee.
Westhope	Bottineau	.....	6	43.6	.....	76	9	15	16	46	2.31	.....	0.68	.....	9	8	19	3	ne.	W. A. Meddaugh.
Willow City	do	1,471	19	42.8	+ 2.9	76	3†	19	21	51	1.75	+ 0.89	0.49	1.0	6	7	17	6	e.	M. A. Ostby.
Minnesota.																				
Albert Lea	Freeborn	1,229	21	48.8	+ 3.3	76	5	26	3	39	2.40	− 0.08	1.25	0	6	10	15	5	nw.	Edward Carey.
Alexandria	Douglas	1,391	18	45.8	+ 4.4	81	4†	19	1	46	2.47	+ 0.28	1.20	T.	6	18	1	11	nw.	P. O. Unumb.
Angus	Polk	870	10	43.5	+ 3.3	78	4	17	27	42	2.13	.....	0.60	.....	8	12	11	7	nw.	John Nadvornik.
Bagley	Clearwater	.....	6	42.7	.....	76	5	16	17	45	1.32	.....	0.92	T.	4	6	20	4	se.	Jens Nelson.
Baudette	Beltrami	1,084	1	42.2	.....	73	4	19	22	38	1.63	.....	1.19	0.5	8	13	11	6	nw.	C. S. Dahlquist.
Beardsley	Bigstone	1,090	16	48.5	+ 4.1	84	4	15	1	52	4.26	+ 2.00	1.75	0	7	12	9	9	se.	G. L. Fitzgerald.
Beaulieu	Mahnomen	1,200	9	43.4	.....	79	5	10	1	51	.....	.....	.....	.....	4	22	3	5	e.	Dr. P. A. Slattery.
Bemidji	Beltrami	1,400	9	.....	.....	.....	.....	.....	.....	.....	1.45	.....	0.80	0	8	.....	.....	.....	.....	C. W. Warfield.
Bird Island	Renville	1,039	22	47.2	+ 2.4	80	5	23	7	50	2.93	+ 0.74	0.87	T.	7	11	6	13	nw.	Dr. F. L. Puffer.
Brainerd	Crow Wing	1,215	5	45.4	.....	80	5	20	7	40	1.42	.....	0.51	0	8	11	6	13	n.	Theodore Miller.
Caledonia	Houston	1,179	19	48.9	+ 3.3	71	11	27	3	30	2.22	− 0.84	0.54	T.	7	13	2	15	sw.	W. D. Belden.
Campbell	Wilkin	984	6	45.2	.....	82	4	17	17	53	3.69	.....	1.20	0	8	15	4	11	se.	J. T. Neisess.
Cass Lake	Cass	1,300	5	.....	.....	.....	.....	.....	.....	.....	0.83	.....	0.50	T.	3	.....	.....	.....	.....	C. W. Burns.
Collegeville	Stearns	1,282	19	47.4	+ 2.7	79	5	24	7	45	1.64	− 0.35	0.46	0.2	6	12	7	11	sw.	F. Tembreull.
Crookston	Polk	863	23	43.7	+ 1.9	75	4	15	1	40	1.58	− 0.32	0.70	T.	8	16	6	8	s.	A. G. Andersen.
Detroit	Becker	1,364	16	45.4	+ 5.8	78	4†	15	27	46	1.26	− 0.58	0.80	T.	5	18	4	8	sw.	G. W. Peoples.
Ely	St. Louis	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. A. Barnes.
Fairmont (near)	Martin	1,240	25	47.6	+ 2.5	75	12	28	1†	32	2.91	+ 0.08	1.15	0	7	13	11	6	s.	W. F. Wherland.
Faribault	Rice	1,003	14	47.2	+ 2.5	70	9	25	6	37	3.08	+ 1.41	1.50	0	4	17	11	2	ne.	Alice Chambers.
Farmington	Dakota	902	24	47.8	+ 2.7	77	5	25	7†	40	2.11	− 0.33	1.10	0.5	6	12	5	13	sw.	E. D. Akin.
Fergus Falls	Ottertail	1,210	20	47.6	+ 4.4	75	4†	23	7	38	1.93	− 0.13	1.13	0.1	9	12	11	7	se.	C. E. Kissinger.
Fort Ripley	Crow Wing	1,136	4	43.8	.....	79	5	16	1	46	0.40	− 1.64	0.40	0	1	12	0	18	n.	J. J. Tucker.
Fosston	Polk	1,289	2	44.2	.....	75	4	19	22†	42	11.16	.....	7.07	T.	4	13	12	5	nw.	O. N. Hem.
Glencoe	McLeod	1,000	15	49.7	+ 4.5	77	6	26	7	40	1.95	− 0.06	0.75	0	4	18	12	0	n.	F. B. Reed.
Grand Meadow	Mower	1,338	24	46.2	+ 1.8	70	5†	24	7	35	3.14	+ 0.79	1.70	1.7	9	10	12	8	se.	C. F. Greening.
Gull Lake Dam	Cass	1,215	1	41.4	.....	75	5	20	17	40	1.62	.....	0.66	0	5	11	11	8	n.	G. A. Williams.
Hallock	Kittson	815	13	42.4	+ 1.9	81	4	15	27	45	2.17	+ 0.93	0.50	1.0	9	20	1	9	n.	D. A. Robertson.
Halstadn	Norman	870	6	43.9	.....	86	5	17	1	58	1.54	.....	0.66	0	7	20	3	7	nw.	A. G. Holstrom.
Hinckley	Pine	1,050	7	45.0	.....	77	5	22	1†	46	1.82	.....	0.50	1.9	5	13	7	10	s.	W. R. Newman.
International Falls	Koochiching	1,112	9	41.1	.....	76	4	20	1†	38	1.90	.....	1.02	T.	4	8	11	11	e	Rees Roe.
Itasca State Park	Clearwater	1,500	1	44.6	.....	78	5	6	1	52	1.19	.....	0.99	T.	5	13	11	6	e.	J. A. Stillwell.
Lake Crystal	Blue Earth	.....	4	48.8	.....	79	5	27	7	37	2.20	.....	1.23	0	4	15	7	8	nw.	W. P. Cobb.
Leech Lake Dam	Cass	1,301	24	42.6	+ 2.9	78	5	18	17†	43	1.10	− 0.79	0.69	0	6	3	20	7	nw.	Hans Olson.
Littlefork	Koochiching	.....	2	39.8	.....	72	4	15	1†	45	1.41	.....	0.95	0	7	7	17	6	.....	O. C. Olson.
Long Prairie	Todd	1,299	20	45.4	+ 2.8	81	5	14	1	46	1.26	− 1.30	0.52	0	4	18	3	9	s.	A. L. Sheets.
Lynd	Lyon	1,175	19	50.8	+ 6.0	82	5	24	7	40	3.89	+ 1.04	1.57	T.	6	18	5	7	sw.	J. W. Rouse.
Mankato	Blue Earth	758	14	.....	.....	.....	.....	.....	.....	.....	2.22	+ 0.06	0.90	0	5	16	0	14	sw.	Sadie H. Blake.
Milaca	Millelacs	1,072	13	45.4	+ 3.1	79	5	22	7	41	2.18	+ 0.53	0.71	T.	4	9	11	10	nw.	C. H. Foss.
Milan	Chippewa	955	18	47.4	+ 2.2	82	4†	24	1†	50	2.97	+ 0.87	0.80	T.	6	2	24	4	nw.	O. K. Opjorden.
Minneapolis	Hennepin	918	21	48.6	+ 2.4	79	5	28	7	31	2.22	− 0.22	0.74	0.5	6	15	4	11	s.	U. S. Weather Bureau.
Montevideo	Chippewa	900	22	48.0	+ 2.5	84	4	20	1	50	2.82	+ 0.34	0.95	T.	9	15	7	8	se.	L. G. Moyer.
Moorhead	Clay	935	31	46.0	+ 4.6	82	4	20	7	46	2.26	− 0.07	1.38	T.	5	22	3	5	ne.	U. S. Weather Bureau.
Mora	Kanabec	.....	7	45.6	.....	79	5	20	1	43	2.81	.....	0.94	3.0	6	17	7	6	sw.	Hans Peterson.
Morris	Stevens	1,170	27	46.5	+ 2.3	79	4†	22	1	48	3.20	+ 0.77	1.50	0	.....	17	9	4	nw.	D. T. Wheaton.
New London	Kandiyohi	1,215	18	45.6	+ 2.3	79	4	22	2	43	2.19	− 0.16	0.73	0	7	12	12	6	nw.	Harold Swensen.
New Richland	Waseca	1,180	18	48.4	+ 2.2	76	5	27	7	34	0.72	− 1.26	0.28	0	6	12	13	5	nw.	N. O. Tyrholm.
New Ulm	Brown	791	32	48.4	+ 2.6	84	5	26	7	42	1.61	− 0.25	0.65	T.	8	19	1	10	s.	A. L. Henle.
Osakis	Douglas	1,343	4	45.8	.....	80	5	20	1	45	1.78	.....	0.60	0.5	7	14	7	9	nw.	J. B. Johnson.
Park Rapids	Hubbard	1,426	22	43.8	+ 3.9	78	4†	12	1	44	1.24	− 1.06	0.70	0.3	6	14	1	15	s.	Dr. P. A. Walling.
Pine River Dam	Crow Wing	1,251	25	42.6	+ 2.0	79	10	17	17†	47	1.26	− 1.04	0.60	T.	7	13	8	9	ne.	Neil McKay.
Pokegama Falls	Itasca	1,280	25	42.3	+ 3.4	78	5	16	17	46	1.19	− 0.84	0.66	T.	6	11	10	9	nw.	A. L. Mampel.
Redlake	Beltrami	1,152	4	41.7	.....	74	4	10	1	42	1.34	.....	0.75	T.	3	9	16	5	n.	A. C. Goddard.
Red Wing	Goodhue	680	16	.....	.....	.....	.....	.....	.....	.....	2.52	+ 0.86	0.76	0.5	8	12	2	16	se.	Louis Bach.
Redwood Falls	Redwood	1,050	5	50.0	.....	82	5	25	6	49	2.35	+ 0.14	0.72	T.	6	14	7	9	se.	N. B. Andersen.
Reeds Landing	Wabasha	681	16	.....	.....	.....	.....	.....	.....	.....	2.95	+ 1.14	0.88	0	6	17	0	13	se.	John Deschneau.

TABLE 1.—*Climatological data for April, 1912. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Minnesota—Contd.																			
Rochester	Olmstead	991	7	49.6	.....	74	5†	24	3	40	1.77	.....	0.75	T.	5	16	4	10	se.	Mary P. Cram.
St. Charles	Winona	850	21	48.2	+ 3.1	72	5	25	3	38	2.54	− 0.03	1.18	T.	7	16	3	11	se.	S. W. Gleason.
St. Cloud	Sherburne	1,020	35	47.8	+ 3.8	81	5	24	1	44	2.96	+ 0.61	0.88	T.	8	14	8	8	se.	J. H. Capser.
St. Paul	Ramsey	940	41	49.0	+ 3.3	77	5	28	7	32	2.60	+ 0.27	1.14	1.0	7	13	12	5	se.	U. S. Weather Bureau.
St. Peter	Nicollet	825	17	49.5	+ 2.9	80	5	27	8	40	1.70	− 0.18	0.75	0	5	14	8	8	s.	State Hospital.
Sandstone	Pine	.....	.....	43.8	.....	77	5	16	1	40	2.10	.....	1.50	1.0	3	5	14	11	sw.	A. D. Hale.
Sandy Lake Dam	Aitkin	1,234	19	43.2	+ 3.2	77	5	20	17	46	2.11	+ 0.02	0.78	0	7	5	18	7	nw.	A. Newstrom.
State Sanatorium	Cass	.....	4	44.0	.....	74	5†	21	7†	43	0.89	.....	0.80	0	4	9	11	10	ne.	Dr. L. B. Ohlinger.
Stillwater	Washington	694	6	.....	.....	.....	.....	.....	.....	.....	1.78	.....	0.52	T.	7	20	2	8	s.	Oscar Ostrom.
Taylors Falls	Chisago	759	5	48.2	.....	78	5	20	1†	38	2.67	.....	0.95	1.5	6	17	7	6	nw.	Minneapolis General Elec. Co.
Thief River Falls	Pennington	1,137	1	44.9	.....	78	3	15	27	52	1.83	.....	0.83	T.	4	13	3	14	n.	E. W. Lown.
Tracy	Lyon	.....	.....	48.6	.....	86	5	19	1	48	3.46	.....	1.10	0	6	17	0	13	w.	B. L. English.
Warren	Marshall	859	.....	44.6	.....	82	4	19	27	51	0.86	.....	0.30	0	5	15	10	5	.....	P. H. Holm.
Warroad	Roseau	1,069	2	39.4	.....	76	4	15	22	43	2.21	.....	1.06	0.5	8	17	4	9	e.	J. H. Sawyer.
Winnebago	Faribault	1,100	14	48.0	+ 2.5	81	5	29	1†	39	1.84	− 0.18	1.00	0	7	16	4	10	se.	H. H. Haight.
Winnibigoshish	Itasca	1,300	24	43.4	+ 3.8	77	5	21	7†	44	0.99	− 0.80	0.68	0.2	5	12	6	12	nw.	John Duncan.
Winona	Winona	700	16	50.9	+ 4.1	79	5	24	3	41	2.48	− 0.05	0.82	0.4	10	15	5	10	sw.	P. C. Myers.
Worthington	Nobles	1,593	17	45.8	+ 0.8	70	11	20	1	40	1.75	− 0.43	0.69	0	9	15	4	11	s.	M. P. Mann.
Zumbrota	Goodhue	917	16	48.3	+ 2.6	75	5	26	7	39	2.25	.....	1.34	0.8	5	13	10	7	sw.	W. C. Rowell.
South Dakota.																				
Milbank	Grant	1,148	21	46.8	+ 2.8	83	4	17	1	55	4.40	+ 2.28	1.58	.....	8	18	1	11	nw.	I. T. Partridge.
Sisseton	Roberts	1,202	6	48.4	.....	75	3	24	1	38	6.84	.....	3.66	.....	7	16	0	14	n.	George Gray.
Wisconsin.																				
Antigo	Langlade	1,489	18	43.8	+ 1.6	72	5	21	1	36	2.54	.....	1.10	0	5	16	0	14	w.	Elton C. Larzelere.
Barron	Barron	1,115	21	46.6	+ 4.4	74	5	21	1	43	2.90	+ 0.54	1.00	0	5	15	11	4	w.	Wm. A. Kent.
Beloit	Rock	750	46	48.0	+ 0.5	72	11	25	19	36	2.41	− 0.36	1.32	8.0	6	18	8	4	n.	Smith Observatory.
Big St. Germain Dam	Vilas	1,690	2	41.0	.....	72	5	11	1	45	3.29	.....	1.13	0	10	14	10	6	n.	Fred Hessen.
Brodhead	Green	812	14	49.0	+ 2.0	75	14	23	19	40	2.77	− 0.21	1.00	12.0	6	17	9	4	sw.	Hector D. Kirkpatrick.
Burnett	Dodge	880	8	46.8	.....	72	14	25	3	36	1.45	.....	0.41.	2.2	7	10[a]	12[a]	7[a]	sw.	Geo. W. Smith.
Cottage Grove	Dane	888	1	.....	.....	.....	.....	.....	.....	.....	1.81	.....	0.55	3.8	11	11	15	4	sw.	John E. Mellish.
Darlington	Lafayette	867	6	48.2	.....	75	5†	20	3†	42	2.00	.....	1.30	13.0	4	17	2	11	s.	F. J. O'Neill.
Deerskin Dam	Forest	1,625	2	37.4	.....	70	5	10	1†	48	2.24	.....	0.91	T.	9	10	14	6	sw.	Wm. E. O'Neal.
Delavan	Walworth	920	21	47.2	+ 1.1	73	14	22	19	38	2.38	− 0.64	0.88	10.0	9	12	6	12	sw.	Elwood S. Austin.
Dodgeville	Iowa	1,116	12	49.3[d]	+ 4.2	71[d]	11	25[d]	19	37[d]	.....	.....	.....	12.0	.....	19[d]	1[d]	6[d]	sw.	Thomas Gibbon.
Downing	Dunn	983	10	45.8	+ 2.6	75	5	22	1†	40	2.52	− 0.22	1.10	0	4	9	4	17	se.	Eugene F. Stoddard.
Eau Claire	Eau Claire	800	21	48.9	+ 3.3	79	5	23	3	40	2.99	+ 0.41	1.04	0.4	8	11	13	6	nw.	Robert D. Whitford.
Grand Rapids	Wood	1,021	13	46.0	+ 1.9	75	5	20	3†	42	2.42	− 0.13	0.85	T.	6	15	6	9	sw.	Willis B. Raymond.
Grantsburg	Burnett	1,095	21	46.1	+ 3.0	78	6	22	19†	40	1.58	− 1.20	0.70	1.0	5	17	6	7	se.	Theodore Olsen.
Hancock	Waushara	1,091	20	48.0	+ 3.5	75	5	23	19†	37	1.95	− 0.63	1.00	T.	5	17	4	9	sw.	Frederick B. Hamilton.
Hatfield	Jackson	973	18	48.2	+ 1.3	78	5	18	3	42	2.53	+ 0.05	.....	0	7	2	21	7	ne.	Walter S. Woods.
Hayward	Sawyer	1,197	21	44.9[a]	+ 3.2	76[a]	5	19[a]	1	43[a]	2.18	+ 0.14	0.75	3.5	6	11[a]	10[a]	8[a]	sw.	Wm. E. Swain.
Hillsboro	Vernon	1,000	21	46.4	+ 1.8	72	5	22	19	41	1.96	− 1.01	0.67	T.	4	13	16	1	sw.	Emil V. Wernick.
Koepenick	Langlade	1,683	21	41.6	− 0.1	70	5†	12	3	40	4.89	+ 2.18	1.00	0	7	5	18	7	sw.	Edward S. Koepenick.
Lac du Flambeau	Vilas	.....	2	39.9	.....	69	5	14	1	44	3.13	.....	0.98	0.5	6	17	7	6	s.	W. J. Lovett.
La Crosse	La Crosse	714	40	49.6	+ 2.3	75	5	26	3	35	3.12	+ 0.83	1.13	0.1	10	11	5	14	s.	U. S. Weather Bureau.
Lake Mills	Jefferson	897	21	47.0	+ 1.3	73	11	27	19†	35	1.64	− 2.42	0.53	2.9	9	12	12	6	sw.	S. Newton Dexter Smith.
Lancaster	Grant	1,070	21	48.2	+ 1.6	72	5†	24	3	37	1.92	− 1.03	0.65	3.0	6	11[a]	7[a]	11[a]	w.	Edward Pollock.
Long Lake	Oneida	1,592	4	39.5	.....	72	5	9	3†	50	2.84	.....	1.06	T.	11	11	11	8	s.	Louis Frank.
Madison	Dane	974	43	46.7	+ 2.2	71	14	27	3	32	1.48	− 0.90	0.44	3.4	11	9	13	8	sw.	U. S. Weather Bureau.
Mather	Juneau	962	8	46.5	.....	75	5	21	3	48	2.18	.....	0.54	0	7	12	6	12	e.	Frank Evans.
Mauston	....do.	882	16	45.2	+ 0.2	74	11	18	19	40	1.80	− 0.60	0.60	T.	6	16[a]	5[a]	8[a]	sw.	Eugene L. Hitchcock.
Meadow Valley	....do.	974	21	46.6	+ 1.7	77	5	20	19	43	1.98	− 0.51	0.94	0	6	5	16	9	nw.	Charles H. Johnson.
Medford	Taylor	1,420	23	44.6	+ 2.5	72	5	21	19	38	3.88	+ 1.62	1.55	0	8	21	4	5	s.	Wm. Zeit.
Merrill	Lincoln	1,267	6	44.6[a]	.....	73[a]	5	20[a]	3	41[a]	4.49	.....	1.08	0	7	13[a]	10[a]	6[a]	nw.	J. M. Wilson.
Minocqua	Oneida	1,604	8	41.2	.....	70	5	15	1	41	3.73	.....	1.15	T.	13	11	13	6	sw.	Benjamin W. Applebee.
Mondovi	Buffalo	738	4	48.0	.....	76	5	23	3	40	2.64	.....	0.73	1.0	8	18	2	10	sw.	Dr. Charles Hebard.
Mount Horeb	Dane	1,226	8	47.1	.....	73	11	24	19	38	1.86	.....	0.50	6.0	7	15	4	11	s.	W. M. Lewis.
Muscoda	Grant	666	3	48.9	.....	76	11	24	3†	50	1.39	.....	0.53	0	6	19	4	7	nw.	Wm. Hessler.
Neillsville	Clark	996	22	46.8	+ 2.6	78	5	18	6	42	2.28	− 0.56	1.00	0	5	19	0	11	nw.	Wm. Heaslett.
New Richmond	St. Croix	990	7	47.4	.....	80	5	22	1	42	2.23	.....	1.20	1.0	5	13	14	3	sw.	Franc. A. R. Van Meter.
Osceola	Polk	806	21	47.6	+ 4.2	74	5†	23	1	43	2.43	+ 0.10	1.00	2.0	5	15	8	7	s.	Charles W. Staples.
Park Falls	Price	1,492	21	44.4[b]	.....	73[b]	5	18[b]	2	39[b]	2.46	.....	0.90	0	5	18[b]	3[b]	7[b]	w.	Flambeau Paper Co.
Portage	Columbia	809	23	48.9	+ 2.6	74	11	25	3	35	1.63	− 1.18	0.54	0.5	7	17	5	8	sw.	James H. Martin.
Port Edwards	Wood	969	2	46.8	.....	79	5	20	19	43	2.10	.....	1.00	T.	5	6[a]	6[a]	1[a]	.....	Nekoosa-Edwards Paper Co.
Prairie du Chien	Crawford	690	21	48.3	− 0.1	74	5†	23	3†	50	1.78	− 0.76	0.88	0	6	15	2	13	s.	James A. Gillis.
Prairie du Sac	Sauk	750	4	49.8	.....	76	5†	23	3	44	0.79	.....	0.25	1.5	6	12	8	10	s.	Wis. River Power Co.
Prentice	Price	1,551	14	43.7	+ 2.8	69	5†	20	19	36	3.37	+ 1.27	1.05	T.	8	12	6	12	s.	Joseph G. Lash.
Rhinelander	Oneida	1,550	6	42.1	.....	72	5	14	8	42	3.28	.....	1.45	0	10	14	4	12	sw.	Rhinelander Power Co.
Shullsburg	Lafayette	1,019	6	47.7	.....	72	11	22	3	37	3.10	.....	1.38	11.0	9	15	6	9	s.	Harrison B. Chamberlin.
Solon Springs	Douglas	1,083	6	42.7[d]	.....	77[d]	5†	18[c]	19	45[d]	2.94	.....	1.50	2.0	5	21[b]	2[b]	5[b]	n.	John M. Sayles.
Spooner	Washburn	1,104	18	44.2	.....	75	5	21	7	37	1.75	.....	.....	0.5	.....	16[c]	3[c]	8[c]	.....	Horace A. Bresee.
Stanley	Chippewa	1,082	8	46.8	.....	74	5	22	3	37	3.43	.....	1.30	0	8	14	9	7	sw.	W. Humphrey Scott.
Stevens Point	Portage	1,113	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Gerry E. Culver.
Sugar Camp Dam	Oneida	1,582	2	.....	.....	.....	.....	.....	.....	.....	2.81	.....	1.20	0	7	7	15	8	s.	Lyman Haskins.
Trout Lake	Vilas	.....	.....	39.9	.....	61	5†	19	7	34	3.52	.....	1.03	T.	6	11	13	6	nw.	F. B. Woodruff.
Twin Lakes Dam	....do.	1,625	2	.....	.....	.....	.....	.....	.....	.....	2.44	.....	1.18	T.	5	12	13	5	s.	Albert D. Hansen.
Valley Junction	Monroe	930	20	46.9	+ 2.2	73	5	23	3	39	2.36	− 0.56	0.83	T.	6	15	7	8	nw.	Frederick Muermann.
Viroqua	Vernon	1,412	22	48.1	+ 2.7	72	5†	25	3	30	2.79	− 0.61	0.90	0.5	11	10	8	12	sw.	Henry E. Rogers.
Vudesare	Vilas	1,600	4	38.6	.....	70	5	10	1	46	2.40	.....	0.80	7	18	6[b]	4[b]	7[b]	nw.	Louis L. Thomas.
Watertown	Jefferson	824	21	47.7	+ 2.8	75	11	24	3	39	1.59	− 1.35	0.43	2.0	8	11	16	3	sw.	Chas. J. Salick.
Waukesha	Waukesha	864	21	47.0[a]	+ 1.4	73[a]	14	23[a]	19	36[a]	2.26	− 0.45	0.60	6.3	9	8[a]	20[a]	1[a]	sw.	Carroll College.
Wausau	Marathon	1,212	17	45.7	+ 2.7	71	5†	23	3	36	3.10	+ 0.52	1.26	0	6	17	9	4	se.	Geo. H. Halder.
Weyerhseuser	Rusk	1,297	10	44.4	.....	75	5	18	1	43	2.67	.....	0.91	1.0	8	11	12	7	ne.	Miss Etta Stiles.
Whitehall	Trempealeau	675	21	49.0	+ 2.8	76	5†	21	3	41	1.66	− 0.75	0.90	T.	5	16	0	14	nw.	Hans J. Haugh.
Iowa.																				
Albia	Monroe	959	14	50.8	+ 1.2	76	5	28	3	41	2.84	+ 0.01	0.70	1.0	12	14	7	9	sw.	J. I. Chenoweth.
Algona	Kossuth	1,213	38	48.6	+ 2.4	75	5	28	1†	35	2.73	+ 0.25	1.30	T.	6	18	2	10	nw.	Dr. F. T. Seeley.
Alta	Buena Vista	1,513	21	48.0	+ 1.3	76	5	25	7	39	3.30	+ 0.27	1.23	0.5	11	12	11	7	se.	David E. Hadden.
Amana	Iowa	721	36	50.4	+ 1.8	73	5†	26	3	39	2.94	+ 0.03	0.71	7.0	10	12	11	7	s.	C. Schadt.
Ames	Story	926	36	50.3	+ 1.2	76	5	26	3	41	3.33	+ 0.66	1.26	0	7	.....	.....	.....	sw.	Iowa State College.

TABLE 1.—*Climatological data for April, 1912. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	
Iowa—Continued.																			
Baxter	Jasper	998	12	49.8	+ 1.0	78	5	25	3	38	2.18	− 0.69	0.56	T.	12	15	9	6	sw.	W. R. Vandike.
Belle Plaine	Benton	828	22	50.2	+ 1.3	74	10	24	3	40	1.99	− 1.32	0.37	3.5	9	11	9	10	se.	S. P. Van Dike.
Belmond	Wright	.....	2	48.2	.....	75	5	25	3	38	3.13	.....	1.34	0	4	2	18	10	sw.	Geo. P. Hardwick.
Bloomfield	Davis	.....	5	52.3	.....	75	5	28	3	36	3.61	.....	0.86	4.6	9	18	2	10	sw.	Albert Power.
Bonaparte	Van Buren	.....	21	50.8	+ 0.6	74	11	23	7	32	2.91	− 0.44	0.95	5.0	9	.....	.....	.....	.....	B. R. Vale.
Boone	Boone	1,134	7	49.0	.....	75	5	27	3	32	2.36	.....	0.87	0	7	14	5	11	.....	C. F. Henning.
Britt	Hancock	1,236	15	48.2	+ 2.5	80	24	25	3	44	3.94	+ 1.73	1.75	0	7	17	3	10	se.	L. M. Goodman.
Buckingham	Tama	.....	12	.....	.....	.....	.....	.....	.....	.....	1.19	− 0.88	0.88	T.	6	9	15	6	.....	J. S. Guynn.
Burlington	Des Moines	544	16	51.6	+ 0.1	76	5	27	3	33	2.10	− 1.06	0.85	7.0	5	15	5	10	sw.	Max. E. Poppe, jr.
Carroll	Carroll	1,265	22	47.8	− 0.3	74	12	25	7	43	2.30	− 0.90	1.00	0	6	13	6	11	nw.	Mrs. Jos. J. Wolfe.
Cedar Rapids	Linn	733	30	49.1	− 0.6	75	5	26	3†	45	3.20	+ 0.46	1.80	T.	6	.....	.....	.....	.....	R. S. Toogood.
Charles City	Floyd	1,015	21	48.2	+ 1.9	73	5	26	3	39	2.46	− 0.37	0.78	T.	9	9	8	13	s.	U. S. Weather Bureau.
Clear Lake	Cerro Gordo	1,241	14	48.9	+ 1.9	70	10†	25	3	37	1.80	+ 0.16	1.10	0	3	22	1	7	s.	Oscar Stevens.
Columbus Junction	Louisa	595	11	52.0	+ 2.3	81	14	28	3	32	2.75	− 0.03	1.00	4.1	8	20	5	5	sw.	J. B. Johnston.
Davenport	Scott	580	41	51.2	+ 1.0	74	11	31	3	31	2.76	− 0.12	1.17	7.8	8	10	12	8	sw.	U. S. Weather Bureau.
Decorah	Winnishiek	875	19	47.9	+ 0.2	73	11	20	3	42	1.85	− 0.65	0.67	0	7	.....	.....	.....	.....	F. H. Baker.
Delaware	Delaware	1,083	21	48.4	+ 2.6	73	12	30	7	33	2.34	− 0.44	1.03	3.5	9	11	13	6	se.	William Ball.
Des Moines	Polk	861	34	51.4	+ 0.8	74	5	32	3	28	2.75	− 0.23	1.25	T.	11	10	12	8	sw.	U. S. Weather Bureau.
Dubuque	Dubuque	639	39	49.8	+ 0.9	73	5	27	3	32	2.49	− 0.43	0.81	5.0	10	10	12	8	s.	Do.
Earlham	Madison	.....	10	50.1	+ 2.3	74	5	26	3	34	3.73	+ 0.07	0.90	0	11	15	5	10	se.	George Phillips.
Elkader	Clayton	727	33	48.8	+ 0.8	72	4†	22	3	40	1.76	− 0.93	0.75	0	7	14	7	9	se.	Chas Reinecke.
Elma	Howard	.....	2	48.0k	.....	72k	12	27k	19	34k	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. C. Johnson.
Estherville	Emmit	1,298	17	46.4	+ 0.1	78	5	26	1	38	2.65	+ 0.44	0.80	0	9	.....	.....	.....	.....	A. O. Peterson.
Fairfield	Jefferson	.....	28	51.4	+ 1.6	73	5†	28	3	29	3.67	+ 0.19	0.87	4.0	8	18	2	10	sw.	R. M. McKenzie.
Fayette	Fayette	1,003	22	48.1	+ 1.6	73	5†	22	3	44	1.71	− 1.31	0.45	T.	7	13	8	9	nw.	R. Z. Latimer.
Forest City	Winnebago	1,226	18	47.6	+ 1.1	78	11	26	7	38	2.12	− 0.25	1.12	0	9	15	5	10	s.	J. A. Peters.
Fort Dodge	Webster	1,126	12	49.0	+ 1.6	76	5	29	3	41	2.06	− 1.11	1.00	0	6	.....	.....	.....	.....	F. J. Monk.
Fort Madison	Lee	516	63	.....	.....	.....	.....	.....	.....	.....	2.54	− 0.64	0.70	7.0	7	8	11	11	sw.	Miss L. A. McCready.
Gilman	Marshall	1,052	13	.....	.....	.....	.....	.....	.....	.....	1.33	− 1.03	0.35	0	9	.....	.....	.....	.....	J. L. Wylie.
Grand Meadow	Clayton	1,180	21	48.3	+ 1.5	71	4†	26	3	35	1.43	− 1.54	0.43	0	8	10	13	7	sw.	F. L. Williams.
Grinnell	Poweshiek	1,023	20	50.9	+ 0.6	77	5	25	3	35	2.22	− 1.16	0.55	0.2	10	11	12	7	sw.	D. W. Brainard.
Grundy Center	Grundy	976	21	50.2	+ 2.8	74	5	26	3	41	1.50	− 1.55	0.75	0	5	22	3	5	sw.	J. B. Calderwood.
Guthrie Center	Guthrie	1,077	17	50.6	+ 1.3	75	5	28	3†	40	2.92	+ 0.18	1.00	T.	11	16	7	7	sw.	D. G. Beardsley.
Hampton	Franklin	1,155	22	49.6	+ 2.3	77	5	26	3	33	2.36	− 0.92	0.95	0	6	7	14	9	sw.	E. C. Grenelle.
Independence	Buchanan	921	48	49.0	− 0.4	74	5	25	3	38	1.83	− 0.55	0.50	T.	8	15	9	6	sw.	R. E. Dudley.
Indianola	Warren	969	21	49.0	− 1.7	74	5	30	3	29	3.57	+ 0.17	0.85	T.	10	5	8	17	se.	Prof. J. L. Tilton.
Iowa City	Johnson	683	52	49.0	+ 0.5	74	5	25	3	42	3.50	+ 0.36	1.00	5.0	11	11	8	11	sw.	A. G. Smith.
Iowa Falls	Hardin	1,170	19	47.6	+ 0.9	72	5†	24	3	40	2.83	− 0.05	1.03	0	9	15	3	12	nw.	J. B. Parmelee.
Jefferson	Greene	.....	13	50.0	.....	76	5	28	3†	39	2.18	− 0.42	0.88	0	7	10	11	9	nw.	Ora M. Hall.
Keokuk	Lee	547	41	53.0	+ 1.0	76	5	30	3	31	2.41	− 0.93	0.93	6.0	10	11	11	8	sw.	U. S. Weather Bureau.
Keosauqua	Van Buren	644	20	51.3	− 0.3	77	5†	25	3	44	2.49	− 1.20	0.53	5.5	9	6	16	8	.....	J. H. Landes.
Knoxville	Marion	920	17	51.9	+ 0.7	76	6	28	3	37	2.08	− 1.27	0.70	0	6	10	8	12	sw.	Casey and Bellville.
Lacona	Warren	.....	13	.....	.....	.....	.....	.....	.....	.....	2.44	− 0.52	1.25	2.0	8	7	17	6	.....	J. B. Alter.
Le Claire	Scott	576	12	.....	.....	.....	.....	.....	.....	.....	3.99	+ 1.62	1.55	8.6	12	.....	.....	.....	.....	Miss M. T. Disney.
Marshalltown	Marshall	947	20	50.5	+ 1.7	77	5	25	3	43	2.09	− 0.81	0.49	0	14	14	5	11	.....	Ralph B. Reasoner.
Mason City	Cerro Gordo	1,132	15	48.0	+ 0.3	74	5	24	3	40	3.15	+ 0.50	1.63	0	4	12	8	10	s.	J. S. Mills.
Monroe	Jasper	.....	.....	50.2	.....	75	5†	27	3	35	3.60	.....	0.75	T.	7	16	5	9	s.	J. A. Dibel.
Mount Pleasant	Henry	729	31	51.5	+ 0.4	75	11	22	1	36	3.08	− 0.13	0.93	6.7	11	13	9	8	sw.	J. W. Edwards.
Muscatine	Muscatine	.....	52	.....	.....	.....	.....	.....	.....	.....	2.49	− 0.92	1.15	5.0	9	.....	.....	.....	.....	William Molis.
New Hampton	Chickasaw	1,160	15	48.2	+ 1.3	72	5	25	3†	36	1.24	− 0.71	0.36	0	4	16	7	7	s.	A. F. Kemman.
Northwood	Worth	1,122	16	48.0	+ 1.5	72	25	25	3	34	4.98	+ 2.82	1.83	0	7	14	9	7	nw.	Chas. H. Dwelle.
Olin	Jones	760	14	49.8	+ 2.9	75	11	27	19	40	2.81	+ 0.53	1.32	8.0	5	15	12	3	nw.	Dr. F. W. Port.
Osage	Mitchell	1,184	25	48.2	+ 2.8	74	5	25	3.	37	2.68	+ 0.23	1.04	0	6	16	5	9	se.	Lester Coonradt.
Oskaloosa	Mahaska	843	36	51.0	+ 1.0	78	13	26	3	37	2.04	− 0.69	0.50	3.5	7	17	2	11	nw.	Joseph Boyd.
Ottumwa	Wapello	649	17	51.5	− 0.5	77	5	30	3	32	1.53	− 1.62	0.82	0.9	5	15	9	6	sw.	Chester Potter.
Pella	Marion	877	10	50.8	+ 1.0	75	5†	24	3	40	2.16	− 0.36	0.53	0.2	9	22	4	4	s.	J. H. Ver Steeg.
Perry	Dallas	975	11	50.6	+ 3.3	75	5	29	3	39	2.17	− 0.76	0.76	0	8	14	9	7	se.	S. J. Brumfield.
Plover	Pocahontas	1,426	16	.....	.....	.....	.....	.....	.....	.....	2.55	+ 0.45	1.15	0	7	19	5	6	nw.	J. S. Smith.
Pocahontas	do	1,248	8	48.6	.....	75	5	28	3	34	2.51	.....	1.36	0.3	8	15	9	6	s.	F. E. Hronek.
Ridgeway	Winneshiek	1,215	14	49.8	+ 2.2	74	5	26	3	36	3.02	+ 0.68	1.26	0.1	10	15	10	5	s.	Arthur Betts.
Rockwell City	Calhoun	.....	16	50.2	+ 3.2	75	5†	28	1	39	2.57	− 0.19	1.05	0	4	15	5	10	.....	C. M. Randall.
Sac City	Sac	1,278	36	49.2	+ 1.5	75	5	27	7	31	2.32	− 0.74	1.69	0	3	.....	.....	.....	se.	E. N. Baily.
St. Charles	Madison	1,070	11	51.1	+ 0.5	76	5	28	3	34	3.96	+ 0.42	1.08	0	10	15	6	9	s.	R. D. Minard.
Sigourney	Keokuk	877	16	50.4	− 0.8	75	5†	25	3	35	3.83	+ 0.66	1.00	2.0	13	1	26	3	e.	J. T. Parker.
Stockport	Van Buren	745	10	50.4	.....	74	5†	26	3	37	3.08	− 0.04	0.91	8.0	9	17	3	10	s.	C. L. Beswick.
Storm Lake	Buena Vista	1,440	23	48.8	+ 3.4	72	5	27	7	33	2.91	− 0.57	1.36	1.0	11	12	1	17	sw.	Prof. W. Ingold.
Tipton	Cedar	807	13	52.0	+ 3.1	75	11	30	3	33	3.08	− 0.16	0.91	7.0	9	16	11	3	sw.	F. K. Gregg.
Toledo	Tama	856	18	50.0	+ 0.4	73	5†	24	3	40	1.68	− 1.13	0.40	T.	10	18	6	6	nw.	I. F. Giger.
Wapello	Louisa	588	14	52.4	+ 1.0	74	5	29	3	30	1.96	− 0.63	0.79	12.0	5	15	13	2	sw.	G. W. Schofield.
Washington	Washington	769	30	52.0	+ 1.5	74	5	29	3	31	2.20	− 0.46	1.08	T.	7	9	14	7	nw.	Wm. A. Cook.
Waterloo	Black Hawk	862	29	48.7	+ 1.7	74	5	26	3	43	0.87	− 1.46	0.39	T.	7	17	1	12	e.	Ralph B. Slippy.
Waukee	Dallas	1,039	9	50.2	.....	74	5	28	3	31	3.03	.....	1.08	0	12	15	10	5	sw.	Samuel F. Folt.
Waverly	Bremer	948	16	49.2	+ 2.2	74	5	23	3	43	0.78	− 1.91	0.27	0	4	15	9	6	w.	Earl C. Moore.
West Bend	Palo Alto	1,197	19	50.4	+ 4.1	73	5	27	3†	36	2.35	− 0.37	1.57	0.1	9	15	8	7	sw.	Phil. Dorweiler.
Whitten	Hardin	1,036	15	49.6	+ 2.2	72	5	24	3	33	1.93	− 0.21	0.70	0	4	16	8	6	nw.	Dr. F. P. Butler.
Winterset	Madison	1,129	21	51.6	+ 1.2	75	5	29	3	32	3.82	+ 0.10	0.88	T.	10	8	12	10	se.	Dr. R. S. Cooper.
Missouri.																			
Gorin	Scotland	700	24	.....	.....	.....	.....	.....	.....	.....	2.89	− 1.83	1.17	5.0	8	9	10	11	sw.	J. W. Pulliam.
Hannibal	Marion	534	20	54.2	+ 0.6	78	5	31	3	30	5.32	+ 2.07	1.55	T.	10	11	10	9	sw.	U. S. Weather Bureau.
Louisiana	Pike	500	35	55.2	+ 1.0	82	24	27	3	47	5.91	+ 2.90	2.10	T.	11	19	4	7	n.	J. T. Farrel.
Mexico	Audrain	797	35	53.4	− 0.9	80	5	32	3†	41	4.96	+ 1.47	1.58	0	12	12	3	15	s.	J. F. Llewellyn.
Palmyra	Marion	.....	1	52.8i	.....	74	24	32	18	30	4.27i	.....	1.48	2.0	8i	7i	8i	6i	nw.i	W. B. Markell.
Steffenville	Lewis	576	19	51.9	− 0.6	79	5	28	3	34	3.05	− 0.61	0.67	T.	7	12	10	8	w.	Frank Hall.
Sublett	Adair	1,000	33	52.0	+ 0.5	76	25	26	22	35	4.70	+ 1.16	2.00	5.0	6	9	7	14	se.	Lewis Spriggs.
Vandalia	Audrain	776	2	56.2	.....	80	5†	30	3†	38	5.87	.....	1.32	T.	7	19	1	10	n.	C. B. Ellis.
Warrenton	Warren	865	23	55.5	+ 3.3	81	5†	32	18	39	11.71	+ 7.82	2.47	0	15	9	5	16	s.	Prof. J. H. Frick.
Indiana.																			
Collegeville	Jasper	.....	13	51.1	+ 2.3	79	14	23	3	44	3.54	+ 0.04	1.09	T.	7	9	13	8	sw.	Otto Miller.
Knox	Starke	716	7	51.1	.....	76	14	22	3	36	4.40	.....	2.05	0.4	11	13	10	7	sw.	W. R. R. Tatman.
Laporte	Laporte	810	16	48.4	+ 1.8	78	14	24	3	38	2.66	+ 0.05	0.92	T.	10	15	2	13	nw.	Wm. M. Walton, jr.
Plymouth	Marshall	790	9	50.0	.....	74	14	22	3	35	3.29	.....	1.08	T.	12	13	9	8	sw.	J. W. Siders.

TABLE 1.—*Climatological data for April, 1912. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Illinois.																			
Aledo	Mercer	738	12	51.8	+ 2.0	74	11	27	3	31	2.95	+ 0.07	1.20	9.0	8	11	12	7	nw.	William B. Frew.
Alexander	Morgan	670	19	54.1	+ 1.2	77	5	27	3	31	4.77	+ 1.83	1.54	T.	11	10	12	8	sw.	George H. Hall.
Antioch	Lake	861	11	46.8	+ 1.9	75	11†	20a	19	32a	2.69	− 0.68	1.40	10.0	6	11	11	8	w.	J. C. James.
Astoria	Fulton	650	13	52.4b	+ 1.8	77a	5	28b	19	31b	5.93	+ 2.23	1.65	1.0	10	12	11	7	sw.	Edward V. Bohl.
Aurora	Kane	687	33	48.8	+ 0.9	77a	14	25	3†	40a	2.63	− 0.33	1.03	1.0	8	7	11	12	sw.	W. Holden.
Beardstown	Cass	448									5.60	+ 2.28	1.05	2.0	13					Mrs. L. M. Rice.
Bement	Piatt	700	5	54.3		77	14	30	19	36				0		12	11	7	s.	Rev. C. S. Adams.
Bloomington	McLean	840	21	53.2	+ 1.6	77	12†	29	3	36	6.36	+ 2.51	2.21	T.	8	14	2	14	s.	Prof. H. N. Pearce.
Cairo	Alexander	359	40	59.0	+ 0.7	78	15	40	18	19	5.91	+ 2.34	1.70	0	15	8	6	16	s.	U. S. Weather Bureau.
Carbondale	Jackson	412	7	59.4		86	15	31	8	36	6.38		3.31	0	14	11	9	10	sw.	State Normal University.
Carlinville	Macoupin	663	22	56.2	+ 2.2	79	5†	29	3	32	8.60	+ 4.45	1.90	T.	11	11	15	4	nw.	W. T. Eddy.
Carlyle	Clinton	470	27																	Hervey O. Jones.
Chester	Randolph	380	20								7.20	+ 2.91	3.20	0	17					F. A. Gollon.
Clinton	Dewitt	727	2	53.4		75	14	30	3	32	8.49		2.61	T.	11	14	10	6	sw.	J. Frank Ziegler.
Coatsburg	Adams	763	20	53.4	+ 1.0	77	11	31	3	33	6.02	+ 2.16	1.77	1.0	10	12	8	10	n.	Dr. J. R. Lambert.
Cobden	Union	656	29	59.4	+ 2.5	86	15	36	3†	32	6.85	+ 2.18	1.94	0	13	7	10	13	s.	John Buck.
Dakota	Stephenson	929	7	48.4		73	11	24	19	37	0.69		0.50	5.0	7	10	15	5	sw.	Rev. G. W. Kerstetter
Decatur	Macon	685	21	53.8	+ 1.7	77	14	30	3	42	6.80	+ 3.51	2.13	T.	12	15	11	4	sw.	Prof. J. H. Coonradt.
Dixon	Lee	725	22	49.2	+ 0.5	75	5	24	19	47	3.07	+ 0.28	0.93	8.0	9	14	11	5		H. U. Bardwell.
Du Quoin	Perry	459	24	58.3	+ 2.2	81	14†	32	8	32	6.58	+ 2.55	3.32	0	10	13	7	10	sw.	G. H. Knetzger.
Dwight	Livingston	600	19	51.0	+ 1.6	76	14	28	3	37	4.68	+ 1.78	1.37	0.5	11	12	5	13	sw.	Edward O. Welch.
East St. Louis	St. Clair.	418	2								7.80		2.00	0	17					W. McK. Brown.
Edwardsville	Madison	554	13								8.07	+ 3.83	1.60	0	17					W. H. Morgan.
Elgin	Kane	716	5	49.6a		75a	14	25a	19	37b	2.55		0.78	5.5	9	10	15	5	sw.	Elgin Observatory.
Ewing	Franklin	449	1																	Ewing College.
Fairview	Fulton	733	1								5.07		1.36	2.8	11					Abram Wilson.
Galva	Henry	842	20	49.6	+ 0.1	75	11	27	3†	45	4.65	+ 1.60	2.18	14.5	11	17	2	11	sw.	Prof. F. U. White.
Grafton	Jersey	422	19								7.66	+ 3.98	1.68		14					R. C. Goodrich.
Greenville	Bond	635	34	56.2	+ 1.3	79	14	32	2†	34	7.42	+ 3.19	1.65		15	12	5	13	sw.	M. S. Oudyn.
Griggsville	Pike	650	27	54.8	+ 0.8	78	5	31	3	31	4.45	+ 0.79	1.70	T.	6	18	5	7	sw.	George F. Kneeland.
Havana	Mason	475	20	55.0b	+ 1.9	79a	5†	29b	3	32b	5.09	+ 1.73	1.48	T.	10	13	13	4	s.	F. and C. Borgelt.
Henry	Marshall	500	24	51.6	+ 1.5	75	4†	27	3	37	4.87	+ 1.65	1.73	8.0	11	15	7	8	sw.	Dr. F. A. Powell.
Hillsboro	Montgomery	675	18	54.7	+ 1.6	78	5	30	3	44	7.64	+ 3.83	1.05	T.	14	17	1	12	s.	Ira L. Woodward.
Joliet	Will	541	21	48.6	0.0	77	14	25	19	38	2.77	+ 0.08	1.26	2.5	10	12	8	10	se.	F. M. Muhlig.
Kishwaukee	Winnebago	730	24	49.0	+ 1.3	73	11†	26	19	37	2.87	− 0.37	0.96	7.0	12	13	11	6	sw.	George Stevens.
La Grange	Cook	657	20	49.4	+ 1.7	78	14	27	3†	35	2.91	+ 0.12	0.77	0.5	7	17	6	7	sw.	Prof. F. E. Sanford.
La Harpe	Hancock	698	33	52.4	+ 1.1	76	5†	27	3	36	2.20	− 1.29	0.74	5.0	10	19	6	5	nw.	George E. Campbell.
Lanark	Carroll	883	23	48.8	+ 1.3	74	11	20	19	36	1.77	− 1.40	0.62	6.5	10	18	7	5	sw.	M. N. Wertz.
La Salle	La Salle	536	33	50.6	+ 0.8	74	14	31	18	32	2.98	− 0.12	1.29	5.5	9	11	9	10	sw.	U. S. Weather Bureau.
Lincoln	Logan	482	24	54.2	+ 2.1	76	5†	26	19	34	5.07	+ 2.06	1.58	T.	11	17	4	9	s.	Prof. C. S. Oglevee.
Loami	Sangamon	624	12								5.42	+ 2.13	1.43	T.	8	13	3	14	se.	H. C. Foster.
Macomb	McDonough	700	8								3.90		1.25	5.0	10					State Normal University.
Manteno	Kankakee	711	1								3.64		1.13	T.	12	16	6	8	s.	J. F. Schmeltzer.
Marlinton	Iroquois	633	25	51.0	+ 1.6	79	11†	27	3	44	3.87	+ 0.62	0.86	T.	10	15	2	13	sw.	Joseph H. Peltier.
Mascoutah	St. Clair	425	22	57.9	+ 3.6	82	14	31	8	36	6.15	+ 1.82	3.00	0	9	13	7	10	se.	George Henrich.
Minonk	Woodford	745	19	52.6	+ 2.4	77	11	30	3†	36	5.57	+ 2.58	1.50	1.5	10	16	4	10	s.	M. H. Pfaffle.
Monmouth	Warren	784	20	51.9	+ 0.9	77	13	26	3	34	3.98	+ 0.81	1.15	9.0	8	17	0	13	sw.	Dr. J. C. Hutchison.
Morris	Grundy	518	1	50.2		76	14	29	3†	39	3.44		1.09	4.0	9	15	4	11	s.	E. G. Cryder.
Morrison	Whiteside	685	18	50.0	+ 0.9	74	11	22	19	37	2.84	− 0.50	1.04	10.0	9	15	9	6	s.	S. A. Maxwell.
Morrisonville	Christian	638	13	54.8	+ 3.0	77	14	27	3	35	5.70	+ 2.04	1.26	T.	14	14	9	7	s.	J. D. Lowis.
Mount Vernon	Jefferson	511	18	57.6	+ 3.1	82	12†	31	3	47	3.81	+ 0.18	1.06	0	11	14	4	12	sw.	Theodore P. Stelle.
Nashville	Washington	503	12								5.60	+ 2.38	3.27	0	10					H. M. Potter.
Oregon	Ogle	702	3	49.5		73	14	26	19	36	3.52		1.00	6.0	9	13	7	10	sw.	Samuel Ray.
Ottawa	Lasalle	500	26	52.2	+ 1.6	77	11†	27a	3	37a	3.30	+ 0.35	1.32	1.0	7	17	2	11	sw.	Miss Maude M. Harris.
Pana	Christian	692	26	56.2	+ 2.9	79	12	32a	3	35a	5.10	+ 1.29	1.15	T.	12	18	6	6	nw.	C. W. Sibley.
Peoria	Peoria	609	56	51.5	+ 0.6	75	5	30	19	33	6.88	+ 3.60	2.39	4.5	12	8	16	6	s.	U. S. Weather Bureau.
Pontiac	Livingston	546	10	52.6	+ 2.2	75	5†	29	3	34	5.50	+ 1.36	1.58	T.	11	12	8	10	sw.	George Butterworth.
Quincy	Adams	481	6	53.9		78	24	31	3	36	3.88		0.95	0.4	10					Fred J. Brinkoetter.
Riley	McHenry	956	53	47.8	+ 2.0	74	14	26	19	35	2.42	− 0.28	0.85	6.0	10	7	12	11	sw.	John West James.
Roberts	Ford	774	1								4.82		1.29	T.	9	11	15	4	sw.	R. E. Bradbury.
Rockford	Winnebago	763	20	48.3	+ 0.3	73	5†	27	19	34	2.55	− 1.62	0.78	7.0	12	19	0	11		Hosmer C. Porter.
Rushville	Schuyler	670	21	54.0	+ 1.2	77	5	32	3†	30	4.92	+ 0.87	1.54	T.	9	15	8	7	s.	H. F. Dyson.
St. Charles	Kane	700	17	49.4	+ 1.7	75	14	25	3	38	3.88	+ 0.74	1.08	2.0	10	10	15	5	sw.	Dr. William H. Bishop.
St. Peter	Fayette	500	10	56.2	+ 2.6	80	12†	30	3	34	5.32	+ 1.81	2.05		11	8	14	8	sw.	M. L. Lansford.
Sparta	Randolph	538	26	58.0	+ 2.2	81	14	32	2	33	5.88	+ 1.71	2.66	1.0	16	12	8	10	s.	James A. Caldwell.
Springfield	Sangamon	644	32	54.6	+ 2.6	78	5	32	3	33	5.39	+ 2.08	1.33	T.	10	9	12	9	s.	Section Center.
Streator	Lasalle	626	19	51.8	+ 2.0	79	11	27	3	42	4.62	+ 1.62	1.63	2.1	13	19	2	9	sw.	Miss Lora Sweetser.
Sullivan	Moultrie	530	12	55.4	+ 3.9	79	14	29	3	35	5.03	+ 0.68	1.10	T.	9	11	14	5	sw.	C. A. Corbin.
Sycamore	Dekalb	855	32	49.6	+ 2.5	80	14	23	19	44	2.16	− 1.13	0.90	7.0	6	16	1	13	ne.	Miss Edna J. Davis.
Tiskilwa	Bureau	798	28								3.36	+ 0.19	1.15	9.0	10					F. I. Smucker.
Walnut	do.	717	21	50.7	− 0.3	75	11	28	3†	34	3.01	+ 0.13	0.78	7.4	11	13	13	4	s.	O. C. Nussle.
Warsaw	Hancock	501	14								3.41	− 0.27	1.11	12.3	7					W. R. Kirkbride.
Waterloo	Monroe	719	1								6.87		3.13	T.	15					Prof. James E. Raibourn.
White Hall	Greene	573	4	55.4		80	5	28	3	37	5.87		2.05	T.	12	16	6	8	sw.	R. V. Smith.
Windsor	Shelby	681	13	55.5	+ 3.5	79	14	29	3†	39	7.71	+ 4.04	1.58	1.0	13	10	10	10	s.	Herbert Rose.
Winnebago	Winnebago	900	25	48.6	+ 0.9	74	11†	25	19	38	2.50	− 0.87	0.80	8.0	8	16	7	7	sw.	Frank Osborn.
Yorkville	Kendall	584	25	48.7	+ 1.3	75	11	26	19	37	2.41	− 0.52	0.50	2.0	7	15	5	10	w.	Herman A. Grimwood.
Zion	Carroll	938	18			75	11									22	3	5	sw.	Robert F. Gillogly.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 5, Upper Mississippi Valley.*

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
North Dakota.																																
Amenia	Red												T.	1.20	1.40							T.					.35					2.95
Bottineau	Mouse					T.	.19							.03	.12	.27					.03	.12		.11					.09		.40	1.36
Bowbells	do						.36						.21	.10	.34	.74								.03			.02	.02		.23		2.05
Cando	Sheyenne						.47			T.		T.		.39	.39	.03					.45						.33				.72	2.78
Crosby	Mouse					.37	T.				T.	T.	.54	.39				T.	.06	T.		T.				T.		.08			.05	1.49
Devils Lake	Sheyenne					.23	.09			T.		.09		.42	.03						.18			.01		.34	.01	.15			.86	2.41
Donnybrook	Mouse					.53						.19			1.04					.15			T.		.07		.03		.34	.08	2.43
Dunseith	do					T.	.27					T.		.14	.68	.09					.15			.13			.03			.65	2.14
Edmore	Sheyenne						.40						.05	.37	.10						.20						.20	.02	.23		.14	1.71
Fessenden	James						.26						.16	.34	.48						T.	.20					.52		.20		.21	2.37
Forman	Sheyenne													2.20	.30	T.											.15		.07		.10	2.82
Grafton	Red						.33	T.					.05		.68	.05					.22		.10		.02	.41		.18			.01	2.05
Granville	Mouse						.37					.04		1.09		.07					.20				.06			T.			.32	2.15
Hannah	Pembina					T.	.90								.71	.20					.11		T.	.05			.10				.11	2.18
Hansboro	Red						.68					T.			1.00	.24					.08			.02			.03				.74	2.79
Hillsboro	do						T.					T.		1.61	.17	.02											.33				.16	2.29
Lakota	Sheyenne						.01					.40		1.00						T.	.09	T.	T.		T.	T.	.30	.04	.03		T.	1.87
Langdon	Pembina	.10					.29	.11							.97	.14	T.				T.	.16	.01	.19					.47		.19	2.63
Larimore	Red						.22	.01					.41	.30	.68	.02						.06					.52		.16			2.38
Lisbon	Sheyenne							T.					T.	1.47	1.87												.41		.08			3.83
McKinney	Mouse					.10							.70		.40	1.20									T.	T.					.28	2.68
McLeod	Sheyenne											T.		2.85	.50								T.	T.			.50		T.		.25	4.10
Manfred	do					.02	.35					.17		.65	.14	.10					.20		T.		.03	.10	.30	.02	.08		.92	3.08
Mayville	Red							T.					T.	1.56	.19						.05				T.		.31	T.	.11			2.22
Minot	Mouse						.24						.18	.42	1.00	.25					T.				T.						.38	2.47
Minto	Red						.02					.07		.83							.07		T.	.07			.63	.17			T.	1.86
Oriska	Sheyenne						T.					T.		1.51	.28												.41	.13	.06			2.39
Park River	Red						.48					T.	.12	.82		.02					.25			.07		.05	1.10	.07	.16		.05	3.19
Pembina	do						.08	.04					T.		.42	.08					.04			T.			.20		.04			0.90
Power	Sheyenne													3.20		T.								T.			.58				.21	3.99
Pratt	Mouse					.12	.45							.30	1.35	.03												.30		.20		2.75
Towner	do						.34					.04		.17	.68	.27					.28										.42	2.20
University	Red											T.	.02	.84	.01	T.					T.		T.	T.	T.	.02	.46	.14	.16		T.	1.65
Wahpeton	do							T.						.55	.92	.03											1.00	.03				2.53
Walhalla	Pembina						.80							.47	.15						.17						.21	.01			.27	2.08
Westhope	Mouse					.28	.30					.01		.40	.68								.05		.05			.04			.50	2.31
Willow City	do					.22	.18					T.		.31	.49						.10							T.			.45	1.75
Minnesota.																																
Albert Lea	Mississippi						.30								.50	.10						1.25				T.	.20		.05			2.40
Alexandria ‖	do						T.	T.					T.		.22	.88						.03	.02	T.		1.20	.12	T.			2.47
Angus	Red						T.						.20	.37		.03								.09		.08	.60	.47			.29	2.13
Bagley	do						.04					T.														T.	.92		.08		.28	1.32
Baudette	Rainy						.02								.15	.01					.05			.11		.07	1.19	T.	.03			1.63
Beardsley	Minnesota						T.							1.75	.80	.15						.05	.07			.94	.50		T.			4.26
Beaulieu ‖	Red																															
Bemidji ‖	Mississippi												.03			.02						.03		.03		.02	.80	.25			.27	1.45
Bird Island	Minnesota						.15							.14	.87	.13						.83		T.		.07	.14		T.			2.93
Brainerd	Mississippi						.08							.14	.04	.17						.06		.04		.38	.51					1.42
Caledonia ‖	do	T.					T.	.48							.54	.03	T.					.36	.30		T.		.50			.01		2.22
Campbell ‖	Red						T.	.02						.16	.90	.90	.10						T.	T.			1.20	.20	.21			3.69
Cass Lake ‖	Mississippi							T.				.50			.23								T.								.10	0.83
Collegeville	do							.05					.46	.09								.28				.37	.39		T.			1.64
Crookston ‖	Red				T.		T.						.02	.25	.23	.02	.04							.02		T.	.70	T.	.30			1.58
Detroit ‖	do							T.					T.	T.	.10	T.							T.	.05		T.	.80	.25	.06			1.26
Ely	Rainy																															
Fairmont (near)	Minnesota						.40						*	.40	.02							1.15				.07	.72		.15			2.91
Faribault	Mississippi						.18						T.	*	1.50							1.30		T.	.10							3.08
Farmington	do						.08	.02					T.	T.	.56	T.						1.10		T.		.05	.30					2.11
Fergus Falls	Red						.03					T.		.35	.29	.04				T.				T.		.42	.71		.04		.04	1.93
Fort Ripley ‖	Mississippi						T.	T.							T.									T.			.40	T.				0.40
Fosston	Red																				.02			.02			7.07				4.05	11.16
Glencoe	Mississippi													.75								.50				.25	.45					1.95
Grand Meadow	do	.06					.27	.11							.65	.15						1.70	.06	T.	T.	T.	.10		.04			3.14
Gull Lake Dam	do														.15	.48									T.	.24	.66		.09			1.62
Hallock	Red						.12							.20	.40	T.					.05			.05			.50	.10	.25		.50	2.17
Halstead ‖	do													.24	.66	.06								.01			.50	.05	.02			1.54
Hinckley	St. Croix							.10							.50							.42				.43	.37					1.82
International Falls	Rainy	T.					T.	T.							.40	T.								.44		T.	1.02		.04			1.90
Itasca State Park	Mississippi						T.						.07		.05												.99		.04		.04	1.19
Lake Crystal	Minnesota						.31								.23							1.23					.43					2.20
Leech Lake Dam	Mississippi						.03						.07		.11												.69	.13	.07			1.10
Littlefork	Rainy										.02					.03								.10		.10	.95		.05		.16	1.41
Long Prairie	Mississippi						.12															.12				.52	.50					1.26
Lynd	Minnesota					T.	T.							.36	T.	.13						1.57		T.	.61	1.18			.04			3.89
Mankato ‖	do							.36							.27	.13						.90					.56					2.22
Milaca	Mississippi														.48							.71				.67	.32		T.			2.18
Milan	Minnesota						T.							.80	.15							.47	.05	T.		.80	.70					2.97
Minneapolis	Mississippi	T.					.30							.54	.05	T.				T.		.74		T.		.23	.36					2.22
Montevideo ‖	Minnesota						.05	T							.95	.27						.30	.15			.10	.83	.10	.07			2.82
Moorhead	Red						T.					.02		1.38		T.											.32	.08			.46	2.26
Mora	St. Croix						.18								.94	.12						.45				.65	.47					2.81
Morris	Minnesota						.04							.96	.30	.22						.09	T.			.60	.93		.06		T.	3.20
New London	Mississippi						T.							.08	.30	.16						.30				.73	.52		.10			2.19
New Richland	Minnesota						.06	T.						.12		.11						.28		T.		.08	.07	T.				0.72
New Ulm ‖	do						.10	.06							.15	.06						.65	.07	T.	T.	.10	.42					1.61
Osakis	Mississippi						.02								.49	.12						.15	.05			.35	.60				T.	1.78
Park Rapids ‖	do						.01	.03							.03	T.											.70	.43	.04			1.24
Pine River Dam	do						.12					T.			.10	.20						.06				.10	.60	.08				1.26
Pokegama Falls	do						.06	T.				T.	.04		.30	T.						.04					.66	T.	.09			1.19
Red Lake	Red						T.						.25		T.	T.											.75				.34	1.34
Red Wing ‖	Mississippi						T.	.26							.36	.28	T.					.76	.32		.02		.50	.02				2.52
Redwood Falls	Minnesota						.18							.70	.05							.72				.52	.18					2.35
Reeds Landing ‖	Mississippi							.18							.62	.35						.88	.64				.28					2.95
Rochester	do						T.								.50	.07						.75	.25				.20					1.77
St. Charles	do	T.					.14	.04							.72	.19						1.18	.02			T.	.25					2.54
St. Cloud	do						.07	.09							.88	.18						.54		.07		.66	.47					2.96
St. Paul	do						.36							.36	.02					.01		1.14		T.		.22	.49					2.60
St. Peter	Minnesota						.33								.37							.75				.12	.13					1.70
Sandstone ‖	St. Croix							.10											.50			1.60										2.10
Sandy Lake Dam	Mississippi						.06						.22		.20	.24						.11				.61	.78					2.11

TABLE 2.—*Daily precipitation for April, 1912. District No. 5*—Continued.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total.
Minnesota—Contd.																																
State Sanitorium	Mississippi						T.	.01				T.			.05											.80		.03			0.89
Stillwater ‖	St. Croix						T.	.22					T.		.08	.14	T.					.30	.32								1.78
Taylors Falls	do						.24	.12							.42							.78		T.		.16	.95					2.67
Thief River Falls ‖	Red						T.				.20		T.											T.			.83			.40	.40	1.83
Tracy	Minnesota						.50						.98		.10							1.10				.53	.25					3.46
Warren	Red						T.						T.	.20	T.										T.		.15	.30	.01		.20	0.86
Warroad	Rainy						.05			T.				T.	.10						.19			.14		.14	1.06	.22			.31	2.21
Winnebago ‖	Minnesota						T.	.27								T.	T.					1.00	.05		T.	.04	.36	.02	.10	T.		1.84
Winnibigoshish	Mississippi					.04								T.	.10	.02								T.			T.	.68		.15		0.99
Winona	do	.01					.45	.02							.70	.10						.82	.03	.03		.01	.31		T.	T.		2.48
Worthington ‖	Des Moines						.21	.02							.38	.10						.69	.03			.03	.28		.01			1.75
Zumbrota	Mississippi						.18	T.							.65	.05						1.34		T.		.03	T.					2.25
South Dakota.																																
Milbank ‖	Minnesota						.53							.36	1.15	.40						.10	.14				1.58		.08			4.40
Sisseton ‖	do												.09	3.66	.57								.17				2.00	.30	.05			6.84
Wisconsin.																																
Antigo	Wisconsin						.40								T.	.21						1.10		T.		.10	.73					2.54
Barron	Chippewa						T.					T.			.72	.08						1.00	T.			.12	.98					2.90
Beloit	Rock	.14					.15											*	.80			T.					*		*	1.32		2.41
Big St. Germain Dam	Wisconsin						.04	.02					.22		.20	.05	.02					1.13		.11		.09	.81	T.				3.29
Brodhead	Rock						.25								T.			.40	.80							T.	1.00		.27	.05		2.77
Burnett	do	T.	T.				.25	.06							.41	T.			.20			.08	T.	T.	T.	T.	.36		.09			1.45
Cottage Grove	do	.01	T.				.07	.03							.23			.03	.52			.07	T.		.16	T.	.30		.20	.19		1.81
Darlington	do														.60			*	1.30										.10			2.00
Deerskin Dam	Wisconsin						.32						T.		.12	.12						.91		.04	.09	.05	.56	.03				2.24
Delavan	Rock	.15	T.				.04	T.							.14				.88			.40	.02	.04		.15				.56		2.38
Dodgeville	do																															
Downing	Chippewa						T.	T.							T.	1.10						.50			.50	.42	T.					2.52
Eau Claire	do						.46	.04				T.			.80	.09						1.04		.03		.25	.28					2.99
Grand Rapids ‖	Wisconsin							.22							.49		.04					.33	.85	.01	.03		.45					2.42
Grantsburg	St. Croix							.30	.10				T.		*	.40						.08					.70					1.58
Hancock	Wisconsin						.10	T.							.28	T.						1.00	.15			T.	.42					1.95
Hatfield	Black						.43								.60							*	*		*	*	1.50					2.53
Hayward	St. Croix		T.				.65					T.	.25		.75	.08						.35					.10					2.18
Hillsboro	Wisconsin						T.					T.			.67	T.						.67	T.			*	.62					1.96
Koepnick	do						1.00						.40		.40	1.00						.90				.69	.50					4.89
Lac du Flambeau	Chippewa						.90						.25		.02							.98				.50	.48					3.13
La Crosse	Mississippi	.02					.52	.01						1.05	.08	.01						.89		T.		.20	.30		.04			3.12
Lake Mills	Rock	T.					.08								.28			.04	.25			.12		T.	.06	T.	.28		.31	.22		1.64
Lancaster	Mississippi														.65			*	.45			.32				.16			.17	.17		1.92
Long Lake	Wisconsin						.25	.03					.29		.22	.13						1.06	T.	.01	.10	.07	.67	.01				2 84
Madison	Rock	T.	T.				.02	T.						.01	.17	T.		.30	.14			.12	T.	.13		.13	.15		.19	.12		1.48
Mather ‖	Wisconsin							.21							.51	.05						.54	.34	T.	.03		.50					2.18
Mauston	do							T.							.60							.45	.30	.05		.05	.35					1.80
Meadow Valley	do							.08							.34							.94	.08	.03			.51					1.98
Medford	Black						.25	T.				.17			.50	.46						1.40	.15			.30	.65					3.88
Merrill	Wisconsin						.40						1.08		.40	1.01						1.00				.20	.40					4.49
Minocqua	do						.80	.02				.04	.15		.24	.10	.02					1.15	.02	.02		.17	.99	.01				3.73
Mondovi	Mississippi		T.				.47	.10							.63	.29						.73		.01		.20	.21					2.64
Mount Horeb	Rock	T.					.20								.20	T.		.25	.50								.31		.10	.30		1.86
Muscoda ‖	Wisconsin	.04						.04							.53				.08			T.	.34		T.	T.	.36			T.		1.39
Neillsville	Black						.42								.21	.33						1.00	.32				T.					2.28
New Richmond	St. Croix						T.	.10				T.			.05							1.20		T.		.05	.83					2.23
Osceola	do						.28								.15	.25						.75		T.			1.00					2.43
Park Falls	Chippewa						.38	T.				T.				.36	T.					.90	T.	T.	T.	.20	.62	T.				2.46
Portage	Wisconsin		T.				.41	T.					T.		.54	T.			.08			.10			.02	T.	.43		.05			1.63
Port Edwards	do						.30	T.							.30							1.00			.40	.10						2.10
Prairie du Chien ‖	Mississippi							.04							.52		T.					.16			.08		.88			.10		1.78
Prairie du Sac	Wisconsin						.17								.10	T.		T.	.13			.09		T.		T.	.25		.05			0.79
Prentice	Chippewa						*	.66					.10		.40	.05	.06					.95		T.		.10	1.05					3.37
Rhinelander	Wisconsin						.30						.08		.22	.26	.02					1.42	.03		.10	.14	.71					3.28
Shullsburg	Mississippi	.08					.11								.43			1.18	.20			.20				T.	.46		.31		.13	3.10
Solon Springs	St. Croix														.04	.30						.20				1.50	.90					2.94
Spooner ‡	do																															1.75
Stanley	Chippewa						.43	T.				T.	.05	.55	.05							1.30		.20		.25	.60					3.43
Stevens Point	Wisconsin																															
Sugar Camp Dam	do						.45	T.				.20			.15	.15	T.					1.20	T.	T.		T.	.61	.05				2.81
Trout Lake	do						1.00	T.				.25		.19		T.						.95				.10	1.03					3.52
Twin Lakes Dam	do						.32						.06		.18							1.18					.70					2.44
Valley Junction	do	T.					.31								.48							.83	T.		.03	.14	.57					2.36
Viroqua	Mississippi						.10	.02				T.			.90	.10	.01					.46	.28	.10		.17	.60		.05			2.79
Vudesare	Wisconsin						.10					T.	.25		T.	.10							.80			.20	.75	.20				2.40
Watertown ‖	Rock	T.	T.					.09							.34				.20			.06	.15		.12		.20			.43		1.59
Waukesha	Fox	.02	T.			.10	.03								.32				.60			.30	T.	.18			.19			.52		2.26
Wausau	Wisconsin						.32						T.		.44							1.26	.30			.10	.68					3.10
Weyerhaeuser	Chippewa						.26	.04							.68	.03						.91		.07		.10	.58					2.67
Whitehall	Mississippi							T.							.90	.20						.16				.10	.30					1.66
Iowa.																																
Albia ‖	Des Moines	.70						T.				.02	.21	.30	.02			.21	.43			.40					.03		.01	.50	.01	2.84
Algona	do	.02					.05							1.00	T.							1.30				T.	.11		.25			2.73
Alta ‖	Raccoon	.08					.10	.20				.02			.35	.08						1.23	.24				.56		.10	.34		3.30
Amana	Iowa	.26					T.			T.		T.	.16	.22	.71			.58	.12			.25					.18		.21	.25		2.94
Ames	Skunk						.20			T.		.02	.10	.81			T.				T.	1.26							.73	.12		3.33
Baxter	do	.12			.02		.10			.08		.08	.16	.25				.08			T.	.56					.02		.40	.31		2.18
Belle Plaine	Iowa	.25										.03	.20	T.	.25			.35				.23				T.		.10	.21	.37		1.99
Belmond	do					.15								1.14	T.	T.						1.34		T.					.50			3.13
Bloomfield	Mississippi	.40											.57	.16	.76			.86	.11			.80						.31	.14			3.61
Bonaparte	Des Moines	.54											.47	.18	.27			.95				.22					.04		.22	.02		2.91
Boone ‖	do						T.	.30			T.	.05	T.		.55							.87	T.				.01		.20	.38		2.36
Britt	Iowa	T.					.13							1.60	T.	.04	T.					1.75		.01		T.	.06		.35			3.94
Buckingham	Cedar	.04					T.						T.					.03				.15				T.	.09		.60	.28		1.19
Burlington ‖	Mississippi	.35						.05					T.	.50	T.			T.	.85			T.								.35		2.10
Carroll	Raccoon							.10				.05	T.		.54							1.00							.12	.49		2.30
Cedar Rapids ‖	Cedar	.15						T.						T.	1.80			T.	.40			.23					.25		T.	.37		3.20
Charles City	do	.02					.54							.78		.01					.05	.54		.01		.21			.30			2.46
Clear Lake	do														.10							1.10							.62			1.80

TABLE 2.—*Daily precipitation for April, 1912. District No. 5*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Iowa—Continued.																																
Clinton	Mississippi																															
Columbus Junction	Iowa	.62					T.			T.			.08	T.	.20				.01	T.		.25				T.	.12		.43	.05		2.75
Davenport	Mississippi	.53					.12	T.		T.				.15	T.		T.	1.10	.07			.06				.18			.55	T.		2.76
Decorah	do						.25								.67	.02						.43		.08		.21			.19			1.85
Delaware	do	T.					.10							1.03	.01			.22	.12			.10		T.		T.	.38		.24	.14		2.34
Des Moines	Des Moines	.12					.05			.06		.06	.19	.21		T.		.09			.71	.54				T.	T.		.61	.11	T.	2.75
Dubuque	Mississippi	.01					.29	T.					T.	.68	.13			.48	T.			.20		.04		.35			.21	.10		2.49
Earlham	Raccoon	.05					.12			.13		.26	.46	.53				.11			.04	.86					T.		.54	.63		3.73
Elkader	Mississippi	T.					.10						T.		.75	T.		T.				.25		T.	.02	.05	.40		.19			1.76
Elma	Wapsipinicon														.50	T.						.40		.02	T.	T.	.15		.43	.01		
Estherville	Des Moines						.20	.15							.75	.15						.80	.05			T.	.55		.05	.05		2.65
Fairfield	Skunk		.80				T.						T.	.44	.67			.87	.40			.25				T.			.22	.02		3.67
Fayette	Mississippi						.15	T.						.45	T.	.05		T.				.36		.05		T.	.35		.30			1.71
Forest City	Cedar						.05	.25				T.			.20	.26						.90	.22				.11		.11	.02		2.12
Fort Dodge	Des Moines						T.	.07				.09	T.		.20		T.					1.00	T.				T.		.20	.50		2.06
Fort Madison	Mississippi	.40					.23						.41	.12				.70				.10							.58			2.54
Gilman	Iowa	.13					.08		.03					.05				.22			.28						.16		.35		.03	1.33
Grand Meadow	Mississippi						.17								.43	.04		T.				.29		T.	.03	.05	.25		.17			1.43
Grinnell	Iowa	.25					.06			T.		.03	.24	.02				.25	.16			.35				T.			.31	.55		2.22
Grundy Center	Cedar						.14								.15							.42					.04		.75			1.50
Guthrie Center	Raccoon						.24			.03		.22	.19	.03				.02			.18	.80				T.	.03		1.00	.18		2.92
Hampton	Cedar					.04	.50							.45								.95		.04					.38			2.36
Humboldt	Des Moines																															
Independence	Wapsipinicon						.08						.02		.36			T.				.50				.04	.15		.46	.22		1.83
Indianola	Des Moines	.44					.04			.04		.15	.30	.02				.85			T.	.83				T.	T.		.27	.63		3.57
Iowa City	Iowa	.45	T.				.03	.05						.06	1.00			.30	.80			.24					.10		.06	.41		3.50
Iowa Falls	do	.08					.03	.28				T.			1.03		T.					.79	T.		.01		.01		.08	.52		2.83
Jefferson	Raccoon						.15			T.		T.	.15	.02							.17	.88				T.	T.		.71	.10		2.18
Keokuk	Mississippi	.34					.04			T.			.43	.04			T.	.89	.04			.12				.10	.01		.40	T.		2.41
Keosauqua	Des Moines	.53	T.				T.					T.	T.	.23	.18			.40	.50			.27					.11		.05	.22	T.	2.49
Knoxville	do	.40					.10			T.	.30	T.			T.							.40				T.	T.		.18	.70		2.08
Lacona	do	.25									.02	.02		1.25				.60									.10		.10	.10		2.44
Le Claire	Mississippi	.60	.03				T.	.14			T.		.01	T.	.46			.01	1.55	T.		.04	.10				.35		.10	.60	T.	3.99
Marshalltown	Iowa	.14					.04	.06			T.	.02	.02	.15	.40		.02	T.	.04			.40	.01				.06		.24	.49		2.09
Mason City	Cedar						.12							1.10								1.63							.30			3.15
Monroe	Skunk	.47					T.			T.		T.	.35	.52				.26				.58				.75			.67			3.60
Mount Pleasant	do	.78					.02						.25	.18	.13			.93	.20			.13				T.	.11		.33	.02		3.08
Muscatine	Mississippi	.46						.03			T.				.06			.11	1.15			.15					.10		.05	.38		2.49
New Hampton	Wapsipinicon												T.	T.	.35	T.						.20					.33		.36			1.24
Northwood	Cedar						.82	.06				T.		1.83		.30						1.72		.18					.07			4.98
Olin	Wapsipinicon	.34													.62			1.32								.25			.28			2.81
Osage	Cedar						.30							1.04	.04							.92					.08		.30			2.68
Oskaloosa	Des Moines	.45					T.			T.		.02	.12					.44			.50					.15			.36			2.04
Ottumwa	do												.82	.32					.09										.29	.01		1.53
Pella	do						.02			T.		.04	.27	T.				.25	.22			.51				T.	.11		.11	.53		2.16
Perry	Raccoon					.10	.20			T.		.07	.10	.44								.76							.40	.10		2.17
Plover	Des Moines						.15							.35							.05	1.15				.05	.30		.50			2.55
Pocahontas	do	.05					.14					.05		.13	T.						.05	1.31				T.	.27		.51			2.51
Ridgeway	Mississippi	T.					.72							1.08	.18	.04						.31		.08		.08	.34		.17		.02	3.02
Rockwell City	Raccoon						.42							.15	T.					1.05									.95			2.57
Sac City	do										T.		T.		T.							1.60					.15		.48			2.32
St. Charles	Des Moines	.35					.05			.15		.20	.61	.20				.25			T.	1.08				T.			.40	.58		3.96
Sigourney	Skunk	.42					.03			T.		.05	.10	.18	.90			1.00	.20			.30				.02	.18		.24	.21		3.83
Stockport	do	.91					T.						.46	.40				.60	.22			.21				T.	.05		.21	.02		3.08
Storm Lake	Raccoon	.06					.24					.02		.34	.01	.03					.15	1.36				.03	.27		.40			2.91
Tipton	Cedar	.41											T.	T.	.75				.91			.36			.03	.09	.09		.42	.02		3.08
Toledo	Iowa	.15					.06					.02	.13	T.				.15	.12			.30	T.			T.	.10		.25	.40		1.68
Wapello	do	.48												T.		.10			.79				.08							.51		1.96
Washington	Skunk												.12	.41			.40	.68				.25				.02			.32			2.20
Waterloo	Cedar	T.					T.	.06							.06	T.					T.	.15			.02		.12		.07	.39		0.87
Waukee	Raccoon	.09					.04			.04		.09	.26	.53				.04			.02	1.06				T.	.03		.44	.39		3.03
Waverly	Cedar						.11															.20				.27		.20				0.78
Webster City	Des Moines																															
West Bend	do	.01					.05							.12	T.	.07						.90	.67			.05	.16		.32			2.35
Whitten	Iowa						T.	T.						.70								.53					.10		.60			1.93
Winterset	Des Moines	.06					T.			.21		.36	.72	.44	.02			.08			T.	.88	T.			T.			.43	.62		3.82
Missouri.																																
Gorin	Mississippi	.42				.27							.25	.27				1.17				.24				.07		.20				2.89
Hannibal	do	.42					.04			T.		T.	.52	.48			T.	1.17		T.		.36				.61	.11		1.54	.07		5.32
Louisiana	do	.30					.07			T.			.71	.21				1.36	.04			.25				.03	.55		2.10	.29		5.91
Mexico	do	.10	.53				T.	.14			T.			.04	.18			.53	.18		T.	.53	T.	T.			.83		1.58	.31	.01	4.96
Palmyra	do												.16	.33				.25	.81			.32					.62		1.48	.30		4.27
Steffenville	do	.55					T.					T.	.30	T.			T.	.67	.33								.45	.42	.33			3.05
Sublett	do	.75					T.					T.	.50	2.00				1.00	.25			.20				T.						4.70
Vandalia	do		.38										1.32					1.31									.96		1.65	.25		5.87
Warrenton	do	.04	.58					.14			T.			2.18	.88			1.20	.30		.05	.20	.01	T.		2.47	.42	1.57	1.66	.01	11.71
Indiana.																																
Collegeville	Iroquois	.15					.54			T.			.71					.68	T.	T.					T.		.24		.13	1.09		3.54
Knox	Kankakee	.10	.01				T.	.62					.26		.06			.34	.29				.55				.11		.01	2.05		4.40
Laporte	do	.23					.30	.10		T.			.06	T.				.22	.22				.22				.06		.33	.92		2.66
Plymouth	do	.09	.01				.02	.56					.07	T.	.27			.08	.27		T.		.74				.09		.01	1.08		3.29
Illinois.																																
Aledo	Mississippi	.63					.19	T.					T.		.08			1.20	.09			.09				T.			.66	.01		2.95
Alexander	Illinois	.48	T.				.39			.03			.32	.07	.03			.90	T.	T.		.20				T.	.50		1.54	.31		4.77
Antioch	do	.10					.22								.12			.55	.85										.85			2.69
Astoria	do	.27					.22			T.			.75	T.	.68			1.15	.12	T.		.38				T.	.67		1.65	.04		5.93
Aurora	do	.45	T.				.16								.02			1.03				.14					.12	.70		.01		2.63
Beardstown	do	.15	.35				.28				T.			1.05	.08			.15	.80	.04		.30	.05				.85		.80	.70	T.	5.60
Bement	Mississippi																															
Bloomington	Illinois	.25					.12			T.			2.21					1.79	.05			.18							1.56	.20		6.36
Cairo	Mississippi	1.62	.07				.31	.01		.01	T.		.36	.05	.23			.26		.01	T.	.15	T.			.72	.41		1.66	.04	T.	5.91
Carbondale	do	.17	.73					.54			T.		T.	.27	.10		T.	.35		.02	.03	.05	.07			.25	3.31		.26	.23		6.38
Carlinville	Illinois	.43	.21				.60			.02			.68	.06			T.	1.42	T.	T.		.58	T.			T.	1.64		1.06	1.90		8.60
Carlyle	Mississippi																															
Chester	do	.06	.94	.28				.08			.01			.42	.08			.36	.02	.01	.02	.10	.96				3.20	.30	.12	.24		7.20

TABLE 2.—*Daily precipitation for April, 1912. District No. 5*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Illinois—Continued.																															
Clinton	Illinois	.43					.50						.50		.21			2.61	.09	T.		.71	.01				.56		.64	2.23		8.49
Coatsburg	Mississippi	.50					.05						.75		.39			1.27		T.		.40	.02				.79		1.77	.08		6.02
Cobden	do	.62	.81				T.	.43			T.		.46	.14		.38	T.	.28		.08			.51			.36	1.94		.76	.08		6.85
Dakota	do	.01					.01								.02		T.	.50	.02			T.					.02		.11			0.69
Decatur ‖	Illinois	.02	.55					.39					.03	.37	.20			.61	1.52			.11					.61		.70	1.66		6.80
Dixon ‖	Mississippi	.47						.35							.05				.77			.04	.15		.05		.26			.93		3.07
Du Quoin	do	.52	.40				.11						.41	.01			T.	.40		T.		1.10					3.32		.16	.15		6.58
Dwight	Illinois	.03	T.				.36						.18		.02			1.24	.12			.64	.06				.20		1.37	.46		4.68
East St. Louis ‖	Mississippi	.05	.81	.08				.55		.02			T.	1.19	.91	T.		.79	.05		.06	.10	.02				2.00	.67	.30	.15	.05	7.80
Edwardsville	do	.16	.67			.10	.20	.20		.04			1.16	.03	.75			1.00		.05	.03	.45				.35	1.60		.78	.50		8.07
Elgin	Illinois	.50					.15								.00			.28	.37			.20					.08		.78	.07		2.55
Ewing	Mississippi																														
Fairview	Illinois	.12					.10			T.			.80		.31			1.02	.11			.26	T.			.01	.48		1.36	.50		5.07
Galva ‖	do	.39	.02					.13			T.		T.	.01	.48			T.	2.18	T.		.12	.17				.21		.09	.85		4.65
Grafton ‖	Mississippi	T.	.70					.66						.52	.33			.69	.26		.06	.11		.04			1.11	.36	.28	1.68	.86	7.66
Greenville	do	.10	.47				.35			.03			.82	.30	.80		.25	.90				.42	.04			.30	1.65		.35	.64		7.42
Griggsville	Illinois						T.			T.			.35	T.				1.30	T.	T.		.35	T.			T.	.54		1.70	.21		4.45
Havana	do	.21					.24						.83		.20			1.17	.05			.29					.60		1.48	.02		5.09
Henry	do	.18					.44	.04					.11		.31			1.00	.25			.55					.26		1.35	.38		4.87
Hillsboro ‖	Mississippi		.60	.18				.21						.72	.25			.45	.78		T.	.26	.48				1.05	.58	1.05	.25	.78	7.64
Joliet	Illinois	.18	T.				.15			.04			.01					.67	.20			.02	T.				.02		1.26	.22		2.77
Kishwaukee	Mississippi	.26					.23								.07		.01	.31	.47			.28	.02		.01	T.	.24		.96	.01		2.87
La Grange	Illinois	.66					.63											.66	.09			T.					.06		.77	.10		2.91
La Harpe	do	.22					.08			T.			.14	T.	.04			.66	.08			.09				T.	.15		.72	.02		2.20
Lanark	Mississippi	.25	T.				.05								.20			.55	.07			.02			.03	T.	.16		.42	.02		1.77
La Salle	Illinois	.34	T.				.14			T.				T.	.06			.87	.06			.06	T.			T.	.16		1.20	.09		2.98
Lincoln	do	.37					.30						.45	T.	.09			1.35	.04	T.		.22	.04			T.	.63		1.09	.49		5.07
Loami	do	.38	T.				T.						.65	T.	.16			1.05	T.	T.	T.	.20	T.			T.	.65		1.43	.90		5.42
Macomb	do	.20					.03						.58	.02				.93	.04			.33				T.	.48		1.25	.04		3.90
Manteno	do	.08	T.				.20	.18			T.		.10		.05			.60	.13				1.13		.07		.17		.60	.33		3.64
Martinton ‖	do		.22					.38						.50	.13			.20	.86	T.	.05		.66				T.		T.	.60	.27	3.87
Mascoutah	Mississippi	.07	.55				T.						T.	.33	.61			1.11					.15			T.	3.00		.11	.22		6.15
Minonk	Illinois	.07	T.				.52						.92	T.	.03			1.50	.20			.05					.28		1.38	.62		5.57
Monmouth	Mississippi	.09					.04						.48		.72			1.15				.10					.34		.66			3.98
Morris	Illinois	.20					.16						T.	.04	T.			1.05	.17	T.		.20			T.		.10		1.09	.43		3.44
Morrison	Mississippi	.47					.12								.32			1.04	.10			.01					.33		.42	.03		2.84
Morrisonville	Illinois	.32	.21				.38			T.			.74	.02	.19			1.26	.02	.02		.11	.05			T.	.98		.66	.74	T.	5.70
Mount Vernon ‖	Mississippi		.35	.35				.16						.75				.24	.27			.07	T.				1.06	.46	.02	.08		3.81
Nashville	do	.01	.85					.10						.36	.07			.46				.05					3.27		.34	.09		5.60
Oregon	do	.65					.50								.05			.30	.30			.65	T.				.02		1.00	.05		3.52
Ottawa	Illinois	.28				.24					.05							.55				.38							1.32	.48		3.30
Pana	Mississippi	.26	.39				T.			T.			.65		.02			.95	.02	T.	.02	.08	.06				1.15		.80	.70		5.10
Peoria	Illinois	.16					.11			T.			1.79	.23	.10			1.42	.03			.15	T.			.08	.39		1.70	.72		6.88
Pontiac	do	.14	T.				.26						1.00		.07			1.58	.18			.22	.01			T.	.24		1.25	.55		5.50
Quincy ‖	Mississippi	.21	T.					.13						.09	.12			.14	.71		T.	.24					.77		.95	.52	T.	3.88
Riley	do	.36					.21								T.		.01	.63	.22			.01	.02				.08		.85	.03		2.42
Roberts	Illinois	.14	T.				.52			T.			.90	T.	.11			1.29	.06			.18	T.			T.	T.		.66	.96		4.82
Rockford ‖	Mississippi	.58	.07					.12							.02				.78	.01		.10	.10	.01	.02		.20			.54		2.55
Rushville	Illinois	.04					.24			T.			.45		.36			1.15		T.		.41				T.	.71		1.54	.02		4.92
St. Charles	do	.55	T.				.23						.06		.04			.80	.25			1.08	T.	T.			.12		.40	.35		3.88
St. Peter	Mississippi	.10	.85				.05			T.			.21	.20	T.			.75		T.		.12	.41			T.	2.05		.35	.23		5.32
Sparta	do	.08	.88				.01	.11		T.	.02		.48	.24	.12		T.	.74		.05	.02	.08	.02			T.	2.66		.30	.07	T.	5.88
Springfield	Illinois	.53					.14			T.			.43	.03	.14		T.	1.13	T.	T.		.32	T.			T.	.59		1.33	.75		5.39
Streator ‖	do	.06	.02	T.				.05	*		T.		1.10		.08			.05	1.08	T.			.20	.03	T.		.21		.10	1.63	.01	4.62
Sullivan	Mississippi	.42	.20					.31					.55		.40			.90	T.			T.					.67		1.10	.48		5.03
Sycamore ‖	do	.25	.22					.07							T.				.90			.07	T.				T.		T.	.65		2.16
Tiskilwa	Illinois	.45	T.				.06	T.					.01		.12			1.00	.10			.29				T.	.10		1.15	.08		3.36
Walnut	Mississippi	.47					.26						.08	.01	.27		T.	.78	.34			.06	.03				.17		.54	T.		3.01
Warsaw ‖	do	.45					T.						1.11		.08			1.02				.13				.17		.45			3.41
Waterloo	do	.04	.71				T.	.14					.40	.41	.64			.82	T.	.09	.03	.09	.12			.17	2.96		.10	.15		6.87
White Hall	Illinois	.40	.12				.13			T.	.01		.80	.04	.42			1.28	T.	T.	T.	.20					.18		2.05	.24	T.	5.87
Windsor	Mississippi	.41	.85				.02	.31		T.	.01		.95	T.	.36			1.58	T.			.03	.10				.94		1.20	.95		7.71
Winnebago	do	.30					.20								.05			.60	.40			.05	T.			T.	T.		.80	.10		2.50
Yorkville	Illinois	.50					.05			.10								.50	.50				T.						.40	.36		2.41
Zion	Mississippi																														

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations for April, 1912. District No. 5, Upper Mississippi Valley.*

Date.	North Dakota.										Minne-ota.															
	Botti-neau. §§		Devils Lake.		Lisbon. §§		Minot. §§		Pembina. §§		Collegeville.		Crooks-ton. §§		Grand Meadow.		Monte-video. §§		Moorhead.		New Ulm. §§		Pine River Dam.		St. Paul.		Winnibi-goshish.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	49	19	49	27	56	22	53	20	45	28	50	30	50	15	48	27	58	20	53	25	56	28	46	22	53	31	46	22
2....	57	26	56	25	56	22	59	25	58	18	49	26	47	23	40	28	51	25	51	22	46	28	47	27	44	30	47	26
3....	74	32	74	31	56	28	74	30	78	30	58	30	66	30	49	28	70	30	74	32	60	30	59	23	56	31	60	32
4....	74	32	75	43	85	32	75	41	73	40	77	41	75	35	68	39	84	45	82	39	73	33	74	34	71	41	76	37
5....	65	33	65	32	83	37	64	36	52	40	79	45	70	40	70	50	83	43	79	37	84	42	77	30	77	48	77	38
6....	46	29	40	29	44	36	47	30	52	32	75	30	41	33	59	35	42	38	41	29	45	43	64	29	60	31	70	30
7....	54	24	51	28	64	18	57	26	49	32	53	24	50	27	48	24	60	24	58	20	54	26	48	19	50	28	47	21
8....	64	27	65	32	86	24	70	31	55	30	69	32	70	33	55	31	81	31	80	34	71	33	64	22	69	38	65	21
9....	74	28	68	30	72	28	76	30	64	28	67	32	60	30	63	37	69	34	64	31	66	37	62	32	64	44	67	30
10....	72	31	68	37	83	37	71	32	68	34	74	41	68	35	68	34	81	55	76	37	76	38	79	36	73	41	67	36
11....	58	41	59	36	72	37	58	35	58	34	73	33	61	38	65	39	80	46	68	43	69	43	68	30	66	44	66	32
12....	46	30	51	33	72	32	47	35	46	32	58	36	55	37	70	37	75	35	62	34	72	42	48	38	68	44	52	37
13....	39	29	41	32	52	39	36	34	51	35	60	34	54	36	63	39	62	35	57	36	63	45	53	34	65	41	53	32
14....	34	33	41	31	56	41	34	32	40	34	62	43	55	35	67	46	55	40	55	36	60	41	49	35	66	47	50	36
15....	37	24	35	26	44	32	36	24	36	28	46	38	35	33	51	39	50	35	36	31	47	39	45	34	51	40	36	34
16....	46	19	45	21	48	31	44	18	51	28	43	30	46	30	39	31	39	32	47	30	42	33	43	29	42	34	45	27
17....	53	37	52	26	50	27	52	21	55	24	47	27	53	28	47	31	51	27	55	25	46	30	51	17	51	31	50	21
18....	56	29	55	30	62	25	55	27	59	28	54	27	55	31	52	29	58	30	58	28	56	31	55	17	55	30	57	25
19....	59	34	57	35	62	29	58	30	62	31	62	35	62	35	57	29	62	30	64	28	62	31	56	28	58	36	64	26
20....	46	37	41	25	62	28	47	40	42	39	61	37	53	34	60	28	64	33	66	30	65	34	63	22	65	41	68	31
21....	50	18	44	24	55	29	51	21	60	26	58	35	50	26	64	37	45	39	52	28	54	36	58	22	54	35	52	33
22....	58	25	57	32	65	23	62	34	58	29	55	27	57	25	52	30	60	29	64	26	56	31	55	23	56	32	56	25
23....	56	32	54	35	67	27	.....	33	58	36	65	35	55	35	65	30	60	33	60	28	71	34	60	23	68	40	54	30
24....	66	37	68	31	76	23	71	28	59	30	64	35	60	27	63	31	69	30	70	26	68	33	63	21	63	38	60	26
25....	66	36	74	40	76	39	60	35	70	34	60	48	70	40	67	45	63	40	66	53	68	40	60	29	70	50	58	38
26....	47	30	44	25	55	40	51	30	34	34	61	37	38	37	57	39	47	44	53	30	53	51	54	34	57	35	52	32
27....	57	22	46	21	55	22	61	27	42	17	51	25	48	22	58	26	54	27	50	22	57	29	50	25	54	31	50	22
28....	54	24	53	33	62	31	65	28	52	22	66	43	50	35	48	39	64	36	56	35	60	32	61	39	56	44	56	26
29....	59	31	56	30	65	27	63	30	64	28	58	34	58	30	62	36	63	31	62	27	66	37	57	24	62	39	59	25
30....	71	35	59	42	56	37	70	39	58	36	59	38	55	38	63	39	60	40	54	44	64	41	59	30	63	43	61	27
Mns..	56.2	29.5	54.8	30.7	63.2	30.1	57.5	30.1	54.9	30.2	60.5	34.2	55.6	31.8	57.9	34.4	62.0	33.9	60.5	31.5	61.0	35.7	57.6	27.6	60.2	37.9	57.4	29.3

Date.	Wisconsin.												Iowa.											
	Eau Claire.		Grantsburg.		Hancock.		La Crosse.		Madison.		Prentice.		Wausau.		Algona.		Cedar Rapids. §§		Charles City.		Daven-port.		Des Moines.		Dubuque.		Keokuk.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	53	26	50	23	50	27	50	31	43	28	42	24	44	26	50	28	44	32	49	32	43	31	48	34	49	31	42	34
2....	48	28	54	23	51	28	41	29	40	31	42	30	45	28	47	32	44	31	40	28	49	35	50	36	45	29	52	35
3....	57	23	46	25	53	23	54	26	49	27	50	28	52	23	56	28	54	26	53	26	55	31	60	32	51	27	59	30
4....	74	38	57	27	73	37	72	41	69	39	66	35	71	35	70	44	71	26	70	39	70	44	71	50	72	42	71	47
5....	79	49	74	42	75	49	75	50	70	48	69	45	71	45	75	43	75	43	73	44	73	51	74	52	73	51	76	57
6....	71	40	78	47	70	45	63	33	65	39	69	45	71	43	64	37	68	47	60	34	70	41	64	39	68	38	74	43
7....	49	28	70	33	45	27	50	32	43	29	46	24	44	25	52	28	49	34	50	32	51	34	53	33	49	34	52	35
8....	67	31	52	22	63	31	67	38	61	35	52	22	56	32	66	35	66	35	65	35	62	37	64	38	64	39	63	40
9....	64	42	64	28	62	46	63	43	62	38	52	34	59	37	62	38	63	38	63	39	68	48	66	46	65	45	67	47
10....	72	32	66	26	68	31	71	36	65	33	62	26	66	30	72	37	74	37	72	33	72	41	70	44	69	37	72	48
11....	72	43	74	40	72	44	71	45	71	44	68	35	66	40	66	45	74	37	64	43	74	52	65	50	71	48	74	52
12....	67	43	68	34	56	38	69	46	55	39	68	38	59	39	72	44	66	45	71	43	62	50	70	48	63	46	67	54
13....	63	40	54	36	56	38	63	43	53	40	60	31	59	33	64	45	69	45	63	44	70	46	68	50	63	45	73	53
14....	69	44	67	33	71	41	70	50	71	46	62	38	54	38	60	45	70	46	67	50	71	53	63	50	69	54	71	54
15....	56	43	66	43	67	46	52	44	58	45	55	40	54	41	48	38	52	48	50	39	58	46	51	41	55	43	63	48
16....	44	34	48	35	47	37	44	38	45	33	46	30	45	34	39	31	46	40	41	36	48	41	43	36	46	42	48	39
17....	54	30	45	32	44	29	50	33	38	30	46	25	55	28	46	33	36	35	47	36	41	32	43	37	43	31	46	32
18....	54	32	51	31	52	30	54	34	48	28	45	24	49	30	52	32	51	33	51	33	46	32	53	36	50	32	48	32
19....	60	25	56	22	58	23	58	31	51	31	55	20	56	25	57	34	55	32	57	30	53	33	56	34	53	32	57	34
20....	65	33	65	25	61	34	64	35	57	34	58	28	63	34	60	32	60	32	59	32	60	36	58	39	58	35	61	40
21....	59	44	49	32	62	42	67	40	67	44	58	29	60	40	62	37	70	33	65	37	71	51	63	41	70	49	71	50
22....	54	32	57	27	56	36	54	36	50	37	48	28	58	32	54	32	55	40	53	35	57	39	57	40	55	39	57	40
23....	68	35	67	34	68	33	70	35	65	36	60	28	63	29	68	38	69	36	67	37	67	40	67	40	67	38	66	41
24....	63	35	65	29	63	35	64	39	61	42	60	31	63	37	67	35	69	38	65	36	68	47	71	46	65	46	73	47
25....	67	45	67	36	66	42	70	51	67	43	60	47	67	39	72	52	69	41	69	51	70	53	68	55	69	51	67	55
26....	66	42	57	38	65	48	61	40	65	42	55	40	60	42	57	46	62	53	57	39	69	46	61	50	63	41	70	52
27....	55	31	55	26	58	33	58	35	58	34	55	28	48	32	62	30	63	36	60	32	61	36	62	38	58	36	63	40
28....	56	39	62	44	52	34	51	40	45	36	52	34	50	33	55	42	49	37	50	40	48	41	55	43	48	40	55	43
29....	65	36	60	34	59	37	64	39	53	38	52	30	60	33	62	36	61	40	62	38	58	41	61	44	60	41	53	42
30....	64	38	65	30	61	31	64	42	58	35	62	30	60	31	62	41	64	39	62	40	62	40	62	44	61	39	63	44
Mns..	61.8	36.0	60.3	31.9	60.1	35.8	60.8	38.5	56.6	36.8	55.8	31.6	57.6	33.8	60.0	37.3	60.6	37.8	59.2	37.1	60.9	41.6	60.6	42.2	59.7	40.0	62.5	43.6

TABLE 3.—*Maximum and minimum temperatures for April, 1912. District No. 5*—Continued.

Date.	Hannibal, Mo.		Laporte, Ind.		Illinois.															
	Cairo.		Greenville.		La Salle.		Monmouth.		Mount Vernon.§§		Peoria.		Springfield.		Winnebago.					
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	46	38	36	32	59	50	63	42	41	32	48	31	60	53	43	32	44	38	38	29
2	55	39	42	26	52	41	55	32	49	33	54	35	54	39	52	33	55	37	46	30
3	57	31	50	24	59	44	57	32	53	31	54	26	61	31	54	31	56	32	51	27
4	73	49	72	34	70	51	75	42	72	41	72	40	79	32	73	40	74	41	70	36
5	78	57	74	45	70	58	77	54	73	51	75	48	79	51	75	49	78	53	72	49
6	74	44	70	40	65	52	73	47	72	42	75	47	76	51	74	43	74	47	71	45
7	54	37	42	32	54	43	57	37	49	36	54	34	57	38	51	35	53	38	49	32
8	63	34	61	30	56	45	61	36	60	39	62	32	64	32	61	31	61	36	60	34
9	66	45	69	39	66	47	70	42	68	43	67	41	74	34	68	39	69	41	66	41
10	70	42	67	35	68	55	73	48	68	36	72	39	77	44	71	43	72	50	68	30
11	75	52	74	40	70	57	76	54	73	49	75	46	80	50	74	46	74	50	74	42
12	66	54	68	45	76	59	75	50	68	46	70	55	82	55	70	50	74	56	65	45
13	73	54	66	45	68	57	76	60	69	45	77	48	78	56	74	46	74	55	64	42
14	74	57	78	47	77	62	79	56	74	55	72	61	82	56	75	54	78	56	74	52
15	66	49	70	50	78	61	74	53	65	46	64	47	81	51	62	47	67	51	60	47
16	50	41	57	38	67	58	61	47	51	38	50	38	53	50	55	39	55	42	50	37
17	47	33	43	36	58	44	51	36	38	32	47	31	52	49	40	31	42	34	38	30
18	51	34	38	32	52	40	53	35	42	31	46	32	51	35	45	31	49	35	45	28
19	54	33	53	26	57	45	58	36	53	31	54	31	63	34	55	30	56	34	55	25
20	65	46	58	36	68	52	68	47	60	35	64	38	70	43	62	43	65	46	60	31
21	74	50	70	43	73	57	74	53	69	49	73	50	79	49	71	52	76	53	70	43
22	58	42	61	36	62	52	60	44	56	41	60	39	55	48	57	40	58	43	60	38
23	67	39	63	28	66	50	68	40	65	36	68	34	70	36	65	33	67	42	65	32
24	75	48	60	45	72	57	75	41	67	50	70	45	82	48	69	46	73	48	64	41
25	67	55	68	38	72	55	76	54	69	49	70	50	73	52	71	53	69	52	70	42
26	73	54	73	40	74	56	72	53	73	48	72	54	80	57	74	50	77	54	70	52
27	65	43	60	39	69	59	66	47	62	37	62	34	67	50	64	37	66	44	60	33
28	65	50	46	35	71	61	69	50	46	40	54	44	74	54	51	41	67	47	48	36
29	51	43	46	39	60	50	60	46	52	40	45	40	65	57	51	40	51	43	56	36
30	63	45	63	34	56	50	64	42	61	35	63	35	59	42	63	36	63	39	62	32
Mean	63.8	44.6	59.9	37.0	65.7	52.3	67.2	45.2	60.6	40.6	63.0	40.8	69.2	45.9	62.3	40.7	64.6	44.6	60.0	37.2

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 6, MISSOURI VALLEY.

MONTROSE W. HAYES, District Editor.

GENERAL SUMMARY.

April, 1912, was a seasonable month. There were, of course, some sections in which the conditions were abnormal in one or more ways, but the prevalence of entirely normal weather for as long a period as a month over a region comprising as much territory as the Missouri River drainage area would be unusual. Comparatively, the temperatures were mildest in Montana and the Dakotas, and the precipitation was heaviest in parts of Montana, North Dakota, the James River Valley of South Dakota, and that part of Missouri lying to the south of the Missouri River. The lower part of the district was crossed by a large number of pronounced barometric depressions which gave a high wind movement throughout the drainage area, but the local storms that occurred in these low-pressure areas were relatively few. The only tornadoes reported were in south-central Kansas on the 20th, and in central Nebraska on the 25th; so far as known there was no loss of life in any of them. Dust storms prevailed over most of Kansas on the 14th, in the northwestern counties on the 25th, and in the southwestern counties of Nebraska on the 27th. The Nebraska storm differed from the usual dust storm, which is merely dust raised and held in suspension by strong winds, and is thus described by the cooperative observer at Benkelman, Dundy County:

> The air was full of dust, but there was little wind; it was very dark for five hours—from 10 a. m. to 3 p. m.—over the country within a radius of about 25 miles of Benkelman. The dust seemed to come from the southwest. Rain began at 12.30 p. m., and at first it was very muddy; there was some hail with the rain, and the stones were mostly congealed mud. After about 15 minutes of this a heavy clear rain fell. It was not accompanied by much wind or electrical disturbance, but the darkness was Stygian. At 3.30 p. m. the rain ceased and the sky cleared. At 6 p. m. a gentle rain began, and continued for several hours; the rainfall for the entire storm was 3.50 inches, one of the heaviest that has occurred here in many years.

During the prevalence of this phenomenon there was a low-pressure area of considerable intensity south-southwest of Benkelman; its center was about 500 miles distant.

As a rule farming operations and other outdoor pursuits progressed favorably. Vegetation was generally backward and there was no injury by the frosts that occurred. In some localities farm work was delayed by the rains, and floods caused some damage to agricultural lands, bridges, and railroads; these were the most material occurrences of a detrimental nature.

TEMPERATURE.

In most of Wyoming, Colorado, western Nebraska, and western Kansas the weather was cooler than in the normal April, but the average daily deficiency in temperature was slight, being as a rule less than 1°. In the remaining territory, or somewhat more than two-thirds of the district, the monthly means were above the normal. From a comparative standpoint Montana and the Dakotas had the warmest weather, for in those States there was an average daily excess in temperature that ranged from 2° to 4°, while in eastern Nebraska, eastern Kansas, Iowa, and Missouri there were few localities that had an average excess as high as 2°. The monthly range in temperature was not as great as it customarily is in April; in fact, the lack of marked ranges, both daily and monthly, was the most noteworthy temperature feature. There are numerous places in the country to the west of the 3,000-foot contour that are favorably situated, principally on account of some topographical peculiarities, for the occurrence of temperature lower than zero during the fourth month of the year, but only in Montana and Wyoming were readings as low as zero recorded. Freezing weather occurred on one or more days in all the region to the north and west of Omaha; below Omaha much of the country did not have a freeze at any time during the month, and below Kansas City there were few places at which the thermometer readings were as low as 32°, although they approached it very closely. There also was an absence of the usual high temperatures that prevail for short periods during this month of transitory weather conditions; at only one station (Lincoln, Kans.) did a reading of 90° occur. There were no well-defined periods of either warm or cold weather, and at the individual stations both the maximum and the minimum occurred on varying dates, although the extremes were recorded at most places during the first 18 days.

PRECIPITATION.

The precipitation chart for April shows a very irregular distribution of the snow and rain. The amounts were greater than the normal in most of Montana, northern and eastern Wyoming, North Dakota, the James River Valley of South Dakota, northern and western Nebraska, in the Missouri Valley below Kansas City, and over the Osage and Gasconade watersheds. The succession of barometric depressions that crossed the district in a southwest to northeast direction caused rains that were heavy locally, but they did not give general precipitation except over the Missouri Valley below Kansas City and in the Missouri counties to the south of the river. The Osage and Gasconade Rivers drain a large part of the latter area, and over their watersheds there were some excessive falls. The greatest precipitation for the month was 11.71 inches at Warrenton, Mo., but the greatest in 24 consecutive hours was 4.15 inches at Nye, Mont. The days with amounts of 0.01 inch or more were well distributed through the month, but the first 10 days were the driest period.

In Montana and Wyoming a large part of the precipitation was in the form of snow, and at high altitudes

in those States and in Colorado melting was comparatively slow. In the western part of South Dakota, especially in the Black Hills, there was a heavy snowstorm from the 12th to the 14th; melting was rapid, however. In the remainder of the district there was not much snow, and in Missouri, Iowa, Kansas, and eastern Nebraska the falls were very scattered and in most cases did not amount to more than a trace.

RIVERS.

Floods occurred during the latter part of March and in April in the principal tributaries of the Missouri River, and in the main stream from the Montana line to the mouth, except in the reach beginning a short distance above Sioux City, Iowa, and extending to a point about halfway between Omaha, Nebr., and St. Joseph, Mo. There were several causes that contributed to the making of these floods. The principal ones were the cold weather of the latter half of the winter, which gave unusually thick ice in the Missouri River and all of its tributaries except the mountain streams; the phenomenal number of heavy snowstorms that occurred during the first two-thirds of March in Nebraska, Kansas, Iowa, and Missouri; and the general though light rains and the marked moderation in the temperature of the last days of March. There was an especially large quantity of ice in the streams above Kansas City; gorges formed and the volume of water liberated by melting snows was backed up above flood height at points in Montana, the Dakotas, and Kansas. Below Kansas City there were no gorges of consequence, but the March snows and the April rains were very heavy over the Grand, Osage, and Gasconade watersheds, and these streams and the Missouri from the mouth of the Grand to its junction with the Mississippi were in flood during the last days of March. High water was general throughout April, but there were few flood stages after the first 10 days of the month, although excessive rains over the Osage and Gasconade from April 25 to 29 gave a moderate flood in those streams, the Missouri below the mouth of the Osage, and in the Mississippi at St. Louis. High water in the Mississippi above the mouth of the Missouri, combined with the Missouri River flood, gave a water level at St. Louis that was unusually high for the season; the river was above the flood stage from April 3 to April 10, inclusive, and on April 30 and May 1.

The greatest damage appears to have been due to the overflowing of wheat and alfalfa; locally there was some loss in stock, and in a few places bridges and roadbeds were carried away.

These floods were especially noteworthy, inasmuch as they were, in both the Missouri and the Mississippi, the highest of record for the early date on which they occurred. At Hermann, on the Missouri River, 103 miles from its mouth, observations have been made, with an unimportant hiatus now and then, since 1873, and before 1912 there was no record of a flood stage occurring before April 25. This year flood stage was reached on March 29. Previous to this the high-water mark for the first three months of the year was 19.8 feet on March 15, 1885; flood stage is at 21 feet.

At St. Louis daily observations have been made since January 1, 1861, and there is no record of a flood stage as early as March 31 (unless caused by an ice gorge). This year the water reached a height of 29.8 feet on March 31, just 0.2 foot below the flood stage, and 4 feet higher than the previous maximum for the first three months of the year, which occurred in March of 1883, 1903, and 1906. Flood stage was reached on April 3; previous to this date the earliest occurrence of a flood stage was on April 22, 1862. The only other April flood stages of record for St. Louis occurred on the 27th in 1881, and on the 26th in 1904.

Full details regarding the floods in the Mississippi Valley during the spring of 1912, will appear in a special bulletin to be issued later by the Weather Bureau.

The following special reports were made by Weather Bureau officials in the Missouri River drainage area:

Helena, Mont.—The unusually rapid melting of the snow over the Milk River watershed from April 1 to 10 caused a flood in that stream and many of its tributaries, and much damage was done below Havre. The towns of Chinook, Hinsdale, Saco, and Glasgow were flooded, and farms were submerged, resulting in much loss of stock. The extremely high stage of water was in a measure due to the formation of ice gorges at various points on the streams.

Williston, N. Dak.—The large field of ice in the river at Williston was dislodged about noon on March 31, and floated with considerable force against the north bank, piling up in one place as high as 8 feet. It remained stationary until about 11 p. m., April 1, when it began to move, but another gorge formed about 4 miles above Williston. Water flowed across country for several miles, returning to the main channel close to the Williston power house. This gorge broke on the early morning of April 4, by which time an immense quantity of ice had accumulated, the gorge being variously estimated at from 6 to 15 miles in length. The river rose rapidly here and the rise was augmented by the formation of gorges below. The water was about 2 feet above flood stage, and a number of houses above and below the city were surrounded. By the morning of April 5 the river had fallen to flood stage, and from the 6th to the 10th it fell rapidly, while from the 11th to the end of April the fall was slow but steady. The actual damage in this immediate vicinity was light.

Bismarck, N. Dak.—The Missouri River was in flood from April 4 to 7, inclusive; the highest stage was reached on the 6th. The bottom lands from the Montana line to the South Dakota line were inundated.

Yankton, S. Dak.—The ice remained in the river much longer than usual. The water began to rise on March 27, and the ice broke up and moved out about 11 a. m. of March 30. A gorge about 7 miles long formed just below the mouth of the James River and remained until April 2. It turned the water of the Missouri up the James, doing considerable damage to the lowlands. It also carried the Howard bridge up the James River. After the 2d there was a fall, but high water again prevailed from the 8th to the 14th, and the lowlands in front of Yankton were submerged from the 11th to the 13th. Two men were drowned on the 8th in an attempt to cross the river when it was full of floating ice and timber.

Huron, S. Dak.—The ice in the principal streams remained intact until about March 25; at the end of March the streams in the Black Hills were carrying more than the normal amount of water on account of melting snows. The Missouri and Cheyenne Rivers were high during the first part of April, and the Bellefourche River, the feeder for the Government irrigation reservoir at Bellefourche, S. Dak., was in flood throughout April.

Kansas City, Mo.—Ice broke up in the Missouri River on March 21 and began moving out on the 22d, but the river was not free of floating ice until March 27. Ice broke up in the Republican and Big Blue Rivers in Kansas on March 16. Gorges formed in the Big Blue, causing quite an overflow, 8 to 10 feet above the flood stage in the middle portion of the valley, interrupting railroad traffic and damaging the roadbed and frail bridges. The ice coming out of the Kaw (Kansas) River damaged some repair work to one of the bridges crossing that stream at Kansas City on March 20, but the loss was small. The Missouri River was above the flood stage at St. Joseph from April 12 to 17, inclusive, and at Kansas City on April 1, 2, 3, 5, 6, and 14 to 18, inclusive. No damage resulted except from seep water in basements in the West Bottoms, and the overflowing of cultivated portions of low bottoms along the Missouri below St. Joseph. The Kansas rivers were comparatively low during April.

TABLE 1.—*Climatological data for April, 1912. District No. 6, Missouri Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Wyoming.																				
Arapahoe	Fremont		2	.....	.....	.....	.....	.....	.....	.....	0.48	.....	0.17	.....	4	11	17	2	ne.	A. E. Dietz.
Barnum	Johnson	5,500	7	.....	.....	.....	.....	.....	.....	.....	1.10	.....	1.00	9.0	2	15	10	5	w.	Thos. Freeguard.
Basin	Bighorn	3,862	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	O. J. Robertson.
Bennett	Carbon		3	.....	.....	.....	.....	.....	.....	.....	0.37	.....	0.12	.....	4	18	8	4	w.	Chas. C. Young.
Big Creek Station	....do	7,500	1	33.6[k]	.....	57[k]	8	17[k]	30	39[k]	1.33	.....	0.45	11.5	6	7[k]	6[k]	6[k]	sw.	U. S. Forest Service.
Burns	Laramie	5,400	2	42.4	.....	68	5	18	21	35	0.87	.....	0.38	6.0	5	8	19	3	nw.	E. W. Bastian.
Casper	Natrona	5,101	3	45.4	.....	73	9	19	6	46	2.41	.....	0.45	7.5	6	13	9	8	sw.	M. C. Cook.
Centennial	Albany	8,074	9	33.1	.....	53	9†	10	26	30	2.44	.....	0.80	24.1	17	6	5	19	w.	Louis A. Gregory.
Cheyenne	Laramie	6,088	41	40.2	− 1.3	62	5	17	22	41	1.62	− 0.23	1.28	14.1	7	10	15	5	nw	U. S. Weather Bureau.
Chugwater	....do	5,282	11	41.4	− 1.6	67[a]	8	14[a]	22	49[a]	1.10	− 0.53	0.60	11.0	3	14[a]	10[a]	5[a]	w.	A. H. Woolever.
Clark	Park	4,320	7	45.8	.....	69	10	27	1†	31	0.98	.....	0.36	T.	8	12	8	10	sw.	Chas. A. C. Snow.
Cody	....do	5,000	5	44.2	.....	72	9	20	6	39	0.80	.....	0.45	.....	4	12	10	8	w.	D. A. Tinkcom.
Crazy Creek	....do	6,828	1	30.7	.....	57	9	− 1	6	47	0.94	.....	0.25	14.0	9	12	6	12	w.	Jas. Smith.
Dome Lake	Sheridan	8,821	4	25.0	.....	46	10	10	15†	27	7.10	.....	1.80	71.0	14	11	13	6	w.	Abe Mills.
Douglas	Converse	4,793	3	42.6	.....	69	9	21	22	44	3.27	.....	1.25	.....	6	.....	.....	.....	.....	Henry C. Miller.
Dubois	Fremont	6,909	5	35.3	.....	63	8	− 2	20	39	3.20	.....	0.90	30.5	9	9	16	5	w.	Dr. F. H. Welty.
Eatons Ranch	Sheridan	4,600	7	45.0	.....	73	4	20	15	41	2.60	.....	0.82	.....	8	19	3	8	n.	F. A. Eaton.
Echeta	Crook	4,200	3	.....	.....	.....	.....	.....	.....	.....	2.31	.....	0.65	10.0	6	15	5	10	s.	M. R. Hunter.
Elk Mountain	Carbon		7	.....	.....	.....	.....	.....	.....	.....	2.80	.....	0.96	52.0	11	.....	.....	.....	.....	Wm. Richardson.
Encampment	....do	7,322	3	35.4[e]	.....	64[e]	29	15[e]	1†	39[e]	0.69	.....	0.16	.....	10	6[e]	18[e]	1[e]	sw.	U. S. Forest Service.
Ervay	Natrona	6,400	3	37.2	.....	62	9	12	6	33	2.10	.....	1.12	19.5	6	14	6	10	sw.	Frank Jameson.
Fort Laramie	Laramie	4,270	34	46.0	+ 0.9	74	8	22	7	50	3.01	+ 1.45	1.32	13.5	6	14	14	2	w.	John Hunton.
Foxpark	Albany	9,015	2	25.6[c]	.....	48[c]	7†	0[c]	1	40[c]	1.90	.....	1.70	19.0	3	10[c]	11[c]	6[c]	w.	U. S. Forest Service.
Germania	Bighorn	4,312	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. E. Watson.
Gillette	Crook	4,546	6	42.0	.....	69	9†	18	14	33	1.61	.....	0.80	14.0	5	20	4	6	.....	S. D. Perry.
Horse Creek	Fremont	.....	.....	27.6	.....	53	8	− 5	20	40	1.52	.....	0.55	25.5	8	11	5	14	w.	U. S. Forest Service.
Hunters Station	Johnson	8,000	6	32.8	.....	58	7†	9	17	40	3.07	.....	1.05	43.0	10	18	2	10	ne.	Do.
Hyattville	Bighorn	4,632	13	46.0	− 0.2	79	9	23	6	45	1.05	.....	0.50	.....	3	9	8	13	w.	Wm. Booth.
Jireh	Converse	5,050	2	.....	.....	.....	.....	.....	.....	.....	3.83	.....	1.50	25.0	8	16	9	5	nw.	P. L. Ford.
Kirtley	....do		8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. M. Zum Brunnen.
Kirwin	Park	9,187	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. L. Tewksbury.
Knowles	Crook	4,500	3	.....	.....	.....	.....	.....	.....	.....	2.92	.....	1.85	15.6	7	.....	.....	.....	.....	Geo. A. Knowles.
Lagrange	Laramie	4,510	2	42.7	.....	69	8†	16	2	45	2.02	.....	0.79	50.0	9	17	8	5	w.	Owen Shupp.
Lander	Fremont	5,372	20	41.1	− 1.1	65	9	17	1	39	1.64	− 0.82	0.85	5.4	6	12	10	8	sw.	U. S. Weather Bureau.
Laramie	Albany	7,188	21	36.4	− 1.3	61	7	8	22	40	1.53	+ 0.43	0.53	15.3	10	17	9	4	se.	University of Wyoming.
Leo	Carbon	6,878	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. A. Cowdin.
Lolabama Ranch	Park	7,052	8	28.9	.....	62	9	− 5	22	50	1.19	.....	1.08	22.0	3	12	10	8	w.	Mary E. Painter.
Lovell	Bighorn	3,825	6	44.2	.....	75	9	18	1†	49	0.63	.....	0.44	.....	3	7	13	10	n.	R. Fred Harrison.
Lusk	Converse	5,007	21	42.8	+ 0.4	71[a]	11	19[a]	6†	49[a]	1.82	+ 0.49	0.80	17.0	4	.....	.....	.....	.....	D. E. Goddard.
Manville	....do	5,050	2	.....	.....	.....	.....	.....	.....	.....	6.01	.....	2.00	18.0	7	14	12	4	sw.	C. A. Sherman.
Moorcroft	Crook	4,111	8	43.2	.....	70	10†	16	1	35	1.88	.....	1.75	12.0	5	13	11	6	s.	C. T. McCampbell.
Moore	Albany	6,000	11	40.3	− 2.2	66[a]	9	15[a]	22	35[a]	1.22	− 0.19	0.60	.....	8[a]	8[a]	12[a]	9[a]	w.	Edwin Moore.
Newcastle	Weston	4,319	5	44.4	.....	72	8	22	1†	38	0.87	.....	0.51	7.0	4	11	8	11	nw.	Dr. S. W. Johnson.
Pathfinder	Natrona	5,735	6	41.7	− 2.5	63	9	21	6	33	0.56	− 0.55	0.15	20.0	9	8	14	8	sw.	U. S. Reclamation Service
Pinebluff	Laramie	5,038	9	42.8	.....	69[d]	4	20[a]	1	36[b]	3.63	.....	1.48	.....	7	.....	.....	.....	.....	C. L. Beatty.
Pine Ridge	Crook	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.37	.....	0.61	12.0	4	19	9	2	.....	J. E. S. Altaffer.
Powell	Park	4,376	4	45.4	.....	73	9	19	1	48	0.79	.....	0.31	T.	8	14	8	8	n.	U. S. Reclamation Service.
Rawlins	Carbon	6,748	10	38.2	− 3.8	61	9	21	1†	34	1.84	+ 0.76	0.76	14.5	11	9	11	10	w.	E. J. Ehrenfeld.
Riverton	Fremont	4,900	3	43.0	.....	70	9	11	1	41	0.55	.....	0.27	.....	5	9	14	7	n.	F. H. Allyn.
Rockypoint	Crook	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.72	.....	0.40	7.0	10	11	11	8	se.	P. Woxen.
Saratoga	Carbon	6,785	14	37.7	− 2.7	62	7	16	22	39	0.44	− 0.75	0.19	11.0	6	9	12	9	sw.	G. Frederick Clark.
Seven-Mile Creek	....do	.....	.....	29.8[h]	.....	51[h]	10†	9[h]	1	38	2.49	.....	0.50	22.0	12	4[h]	6[h]	12[h]	w.	U. S. Forest Service.
Sheridan	Sheridan	3,790	17	43.8	− 0.2	73	10	24	15	42	1.23	+ 0.03	0.44	0.9	10	11	9	10	nw.	U. S. Weather Bureau.
Shoshone Dam	Park	5,385	6	44.4	.....	73	9	24	6	35	0.65	.....	0.35	6.0	3	13	7	10	w.	U. S. Reclamation Service.
Soldiers' Home	Johnson	4,635	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Joel C. Smiley.
South Pass City	Fremont	7,873	10	29.9	.....	55	9	9	23	37	1.16	.....	0.32	11.0	9	12	6	12	sw.	John Sherlock.
Sundance	Crook	.....	.....	41.6	.....	69	10	17	1†	35	1.32	.....	0.57	.....	5	17	4	9	w.	Geo. W. Ashdown.
Thermopolis	Fremont	4,350	8	46.7	.....	74	8	25	6	46	0.71	.....	0.26	3.0	6	16	9	5	sw.	A. L. Duhig.
Ulm	Sheridan	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.31	.....	0.45	9.0	7	16	4	10	nw.	Wm. Coleman.
Verona	....do	4,360	3	.....	.....	.....	.....	.....	.....	.....	1.63	.....	0.43	12.5	6	9	13	8	nw.	O. A. Roode.
Wheatland	Laramie	.....	.....	45.4	.....	17[a]	8†	20[a]	1	42[a]	2.61	.....	1.60	16.8	5	16	5	9	w.	A. de F. Snively.
Wiants Ranch	Carbon	7,400	2	.....	.....	.....	.....	.....	.....	.....	0.80	.....	0.16	11.0	9	19	5	6	sw.	Ira G. Wiant.
Wiley	Park	5,375	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Thos. S. Harrison.
Woodrock	Sheridan	.....	.....	.....	.....	.....	.....	.....	.....	.....	8.85	.....	2.02	96.0	18	10	13	7	sw.	U. S. Forest Service.
Worland	Bighorn	.....	1	44.2	.....	74[b]	9	20[c]	7	49[b]	0.14	.....	0.05	.....	5[a]	16[a]	9[a]	4[a]	se.	Prof. B. C. Buffum.
Wyncote	Laramie	4,207	5	45.0	.....	75	28	21	7	50	2.30	.....	0.90	11.0	8	15	11	4	nw.	U. S. Reclamation Service.
Yellowstone	Yellowstone Park	6,200	24	36.1	− 0.9	61	8	12	6	34	2.24	+ 0.86	0.52	16.1	15	5	14	11	sw.	U. S. Weather Bureau.
Fairview Dome	....do	7,000	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Army.
Fountain	....do	7,220	6	30.6	.....	60[b]	8	− 1	6	48[a]	3.66	.....	0.80	20.6	15	6	5	19	sw.	Do.
Gallatin	....do	.....	1	.....	.....	.....	.....	.....	.....	.....	3.18	.....	0.80	23.8	10	10	4	16	n.	Do.
Grand Canyon	....do	7,900	5	29.6	.....	60	23	− 15	6	63	1.95	.....	0.40	19.5	8	5	11	14	w.	Do.
Lake Yellowstone	....do	7,733	8	28.8	.....	56	8	− 6	6	47	2.10	.....	0.30	21.0	11	16	0	14	sw.	Do.
Norris	....do	7,575	8	29.2	.....	57	8	− 6	6	47	1.05	.....	0.29	12.0	9	15	8	7	w.	Do.
Riverside	....do	6,500	6	33.0	.....	62	8	− 1	6	52	2.73	.....	0.60	27.3	13	9	6	15	sw.	Do.
Sylvan Pass	....do	7,000	5	34.8[g]	.....	59[g]	9	11[g]	20	40[g]	1.98	.....	0.49	20.0	8	6[g]	.....	17[g]	w.	Do.
Thumb	....do	7,772	6	30.0	.....	58	9	− 3	6	46	1.90	.....	0.50	19.0	7	15	0	15	w.	Do.
Tower Falls	....do	6,250	3	36.3	.....	64	8	4	6	52	1.50	.....	0.50	15.0	5	12	1	17	w.	Do.
U. Geyser Basin	....do	7,395	8	29.9	.....	49	1†	4	6	40	1.48	.....	0.60	14.7	9	8	5	17	sw.	Do.
Montana.‡																				
Adel	Cascade	5,200	13	42.0	+ 3.8	70	9	20	6	39	1.34	− 0.55	0.40	6.0	9	10	10	10	w.	Mrs. B. F. Burch.
Agricultural College	Gallatin	4,700	14	40.3	+ 0.8	66	8†	20	6	33	3.59	+ 1.90	1.12	10.0	10	9	17	4	se.	Prof. E. Burke.
Augusta	Lewis and Clark	4,071	13	44.0	+ 3.5	75[a]	7†	19[a]	5	43[a]	1.15	+ 0.11	0.48	0	4	24[a]	0[a]	5[a]	w.	C. C. Covington.
Babb	Teton	4,461	5	39.9	.....	65	9	5	6	38	0.62	.....	0.15	1.5	8	6	18	6	sw.	U. S. Reclamation Service.
Badger Creek	....do	4,060	.....	43.2	.....	73	8	17	6	45	0.56	.....	0.19	.....	9	2	14	14	w.	Do.
Bald Butte	Lewis and Clark	6,500	2	.....	.....	.....	.....	.....	.....	.....	1.79	.....	0.48	18.2	12	7	13	10	.....	M. W. Alderson.
Bigtimber	Sweet Grass	4,072	6	46.2	.....	73	9	24	6	43	1.38	.....	0.98	2.0	3	18	5	7	w.	F. A. Severance.
Bigtimber Creek	....do	.....	2	.....	.....	.....	.....	.....	.....	.....	1.74	.....	0.62	9.0	7	12	14	4	w.	J. T. Mjolsness.
Billings	Yellowstone	3,115	16	46.4	− 0.6	81	10	22	6	51	1.92	+ 0.70	0.70	.....	11	13	4	13	.....	U. S. Weather Bureau.
Blackleaf	Teton	4,260	4	39.5	.....	63	9	12	6	38	1.64	.....	0.63	11.6	6	10	15	5	w.	Roy McNeal.
Bloomfield	Dawson	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. B. Cheney.
Boulder Nursery	Jefferson	4,920	16	39.3	+ 0.3	67[b]	9	16[b]	6	43	2.34	+ 1.60	0.90	24.5	7	6[b]	18[b]	4[b]	s.	U. S. Forest Service.
Bowen	Beaverhead	6,060	5	30.0	.....	48	28	− 1	6†	44	0.36	.....	0.24	T.	4	11	9	10	.....	B. B. Lawrence.
Bridger	Carbon	3,664	3	45.0[e]	.....	77[e]	29	22[e]	1†	47[e]	0.35	.....	0.16	0	6	10[e]	9[e]	8[e]	n.	L. E. Gard.
Broadview	Yellowstone	.....	5	44.7	.....	77	10	14	15	47	2.03	.....	0.99	15.0	7	19	8	3	nw.	Thos. Hunt.
Busby	Rosebud	.....	8	44.4	.....	76	10	15	15	46	1.91	.....	0.58	7.0	10	14	9	7	w.	Rev. G. A. Linscheid.
Busteed	Sweet Grass	.....	4	45.2	.....	80	10	20	12	45	0.97	.....	0.33	1.5	8	12	15	3	w.	T. H. Busteed.
Cabin Creek	Beaverhead	.....	2	.....	.....	.....	.....	.....	.....	.....	0.93	.....	0.34	20.5	6	13	8	9	se.	W. J. Crowell.

TABLE 1.—*Climatological data for April, 1912. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Montana—Continued.																				
Canyon Ferry	Lewis and Clark	3,644	13	45.1	+ 1.9	77b	9	20b	6	47b	1.24	+ 0.53	0.69	.....	7	16	8	6	nw.	A. C. Pratt.
Cascade	Cascade	3,361	7	46.8	.....	74	8†	14	6	45	1.31	.....	0.63	5.0	10	17	8	5	sw.	Dr. E. E. James.
Cheesman Reservoir	Lewis and Clark	5,275	3	35.9	.....	60	8†	14	15	34	2.83	.....	0.70	20.8	11	17	1	12	sw.	C. D. Schmidt.
Chester	Hill	3,140	8	44.4	.....	76	10	18	6	45	1.16	.....	0.50	.....	5	4	12	14	sw.	E. D. Keith.
Chinook	Blaine	2,502	13	46.7	+ 4.2	78	7	22	1	48	2.25	+ 1.69	1.06	.....	5	16	10	4	w.	T. O'Hanlon Co.
Clearcreek	...do		6	43.3a	.....	72a	8	24a	15	35	1.54	.....	0.68	8.0	3	7m	6m	4m	.....	Cortez Sedgewick.
Clemons	Lewis and Clark	4,672	2	.....	.....	.....	.....	.....	.....	.....	2.05	.....	0.66	4.2	8	5	13	12	w.	Frank Eberl.
Clydepark	Park		1	.....	.....	.....	.....	.....	.....	.....	2.35	.....	0.90	11.0	10	12	7	11	w.	Frank Taylor.
Conrad	Teton		1	43.3	.....	74	10	21	5	45	0.75	.....	0.21	3.3	6	18	4	8	sw.	I. S. Martine.
Copper	Meagher		7	.....	.....	.....	.....	.....	.....	.....	0.95	.....	0.32	4.0	7	14	9	7	w.	Orville Harris.
Crow Agency	Rosebud	3,041	29	47.1	+ 2.1	79b	9†	23a	16	4 b	2.38	+ 1.00	0.64	10.8	7	7a	8a	14a	sw.	Ira R. Bamber.
Culbertson	Valley	1,927	9	44.5e	.....	70e	9†	22e	21	44e	1.58	+ 0.98	0.88	2.5	4	6e	7e	12e	.....	G. H. Coulter.
Cummings	Carbon			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. W. Brimmer.
Cut Bank	Teton	3,700	13	43.8	+ 5.2	73	11	13	6	42	0.32	− 0.55	0.17	.....	2	24	1	5	w.	Chas. N. Thomas.
Denton	Fergus	3,500	3	45.4	.....	76	10	24	6	37	1.07	.....	0.80	8.5	7	9	9	12	w.	P. J. Griesenauer.
Dillon	Beaverhead	5,147	14	45.8	+ 3.5	72	8	26	4	40	2.42	+ 0.45	0.92	18.0	11	12	10	8	sw.	Prof. J. E. Monroe.
Dirty Creek	Meagher	6,000	3	.....	.....	.....	.....	.....	.....	.....	0.97	.....	0.25	1.8	14	11	11	8	sw.	Lewis Cameron.
Dry Creek	Broadwater	5,500	2	.....	.....	.....	.....	.....	.....	.....	1.48	.....	0.44	8.2	8	4	16	10	w.	J. C. Stuart.
Dry Wolf Camp	Cascade	6,000	3	.....	.....	.....	.....	.....	.....	.....	1.22	.....	0.22	16.1	11	11	11	8	sw.	Mrs. R. J. Eveleth.
East Gallatin River	Gallatin	6,000	3	.....	.....	.....	.....	.....	.....	.....	2.83	.....	0.60	14.0	12	15	6	9	w.	John Eberhart.
Ekalaka	Custer		11	43.0	+ 2.0	77	10	18	15	39	1.07	+ 0.33	0.40	6.1	8	17	1	12	w.	Wm. Freese.
Elkhorn	Jefferson	6,576	3	.....	.....	.....	.....	.....	.....	.....	3.51	.....	0.52	14.6	13	4	10	16	w.	James Heagan.
Fallon	Custer	2,208	7	45.8	.....	81	10	19	16	46	1.30	.....	0.95	.....	3	19	5	6	w.	A. C. Gifford.
Fish Creek	Silver Bow	8,500	2	33.3	.....	52	8†	12	6	32	2.74	.....	0.68	34.4	12	5	12	13	w.	O. B. Tilton.
Flathead Creek	Gallatin	6,000	1	39.1	.....	67	10	16	6	38	1.54	.....	0.55	3.2	5	6	7	17	nw.	Alta Williams.
Forsyth	Rosebud	2,514	5	47.7	.....	82	10	16	15	49	.....	.....	.....	.....	.....	13	9	8	nw.	H. Mackenzie.
Fort Benton	Chouteau	2,630	32	47.2	+ 4.0	76	4†	30	16	36	1.65	+ 0.47	0.60	.....	4	19a	5a	5a	sw	Jere Sullivan.
Fort Shaw	Cascade	3,500	23	45.6	+ 3.7	75	9	25	21	41	0.31	− 0.26	0.11	1.5	3	15	7	8	sw.	U. S. Reclamation Service.
Fort Harrison	Lewis and Clark	4,004	8	45.0	.....	76	8	22	5	42	.....	.....	.....	.....	.....	12	16	2	w.	Post Hospital.
Foster	Yellowstone		2	46.0	.....	80b	10	15b	30	52b	2.28	.....	0.69	4.0	10	15b	5b	8b	ne.	E. K. Bowman.
Garneill	Fergus	5,500	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Thomas E. Scally.
Glasgow	Valley	2,092	15	43.1	+ 1.0	71	9	20	1	38	0.90	+ 0.14	0.90	.....	1	16	11	3	e.	W. M. Leonard.
Glendive	Dawson	2,069	21	47.0	+ 3.0	79	9	22	15	44	2.20	+ 1.06	0.75	4.0	7	7	16	7	sw.	E. C. Leonard.
Goldbutte	Hill		4	44.8	.....	74	10	19	6	40	0.30	.....	0.11	0	4	8	18	4	w.	Joseph Berthelote.
Graham	Custer		6	45.3	.....	75b	9†	20b	15	43b	2.03	.....	0.82	15.0	9	15b	6b	7b	nw.	J. S. Rue.
Grayling	Gallatin	6,700	6	31.8	.....	57a	9	1a	6	45a	1.62	.....	0.42	11.0	9	6a	5a	18a	sw.	P. Kerzenmacher.
Great Falls	Cascade	3,350	20	47.9	+ 3.1	75	10	25	6	37	0.88	− 0.23	0.38	6.5	7	8	17	5	sw.	S. H. Bauman.
Halfway House	Broadwater	6,000	2	.....	.....	.....	.....	.....	.....	.....	0.75	.....	0.22	8.2	5	15	9	6	sw.	Gordon Deans.
Harlowton	Meagher	4,165	4	42.2	.....	74b	9	21b	23	44	0.36	.....	0.20	0.4	3	10b	8b	10b	w.	Joseph Muir.
Havre	Hill	2,505	32	46.0	+ 3.3	73	10	26	6	44	1.36	+ 0.35	0.89	8.9	5	14	11	5	e.	U. S. Weather Bureau.
Helena	Lewis and Clark	4,110	32	44.4	+ 2.4	70	8	26	6	37	1.21	+ 0.07	0.41	4.6	10	3	6	21	sw.	Do.
Highwood	Chouteau		5	.....	.....	.....	.....	.....	.....	.....	1.75	.....	0.90	12.0	7	12	8	10	sw.	W. S. McCord.
Huntley	Yellowstone	3,014	6	46.8	.....	78	10	22	15	46	2.15	.....	0.95	2.0	7	14	13	3	w.	U. S. Reclamation Service.
Jones Canyon	Gallatin	6,800	3	.....	.....	.....	.....	.....	.....	.....	5.58	.....	1.10	45.0	14	13	0	17	w.	James McCune.
Jordan	Dawson		6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Henderson.
Knobles Ranch	Hill		1	.....	.....	.....	.....	.....	.....	.....	0.79	.....	0.27	3.0	7	14	8	8	sw.	F. H. Knoble.
Lewistown	Fergus	4,010	14	44.2	+ 3.3	72	6†	19	20	40	2.23	+ 0.70	0.84	10.5	7	7	18	5	w.	W. W. Watson.
Lonetree	Chouteau	3,280	6	48.0	.....	76	10	24	6	36	2.46	.....	0.85	10.0	7	18	5	7	w.	E. Wilson.
Lytle	Teton			40.2	.....	77	10	25	6	35	1.35	.....	0.75	5.5	7	15	12	3	sw.	J. F. Fait.
Malta	Valley	2,240	5	45.8	.....	75	3	18	15	45	1.32	.....	0.80	6.0	6	22	5	3	sw.	U. S. Reclamation Service.
Medic ne Lake	...do		1	43.3	.....	73	9	20	16	39	1.67	.....	1.00	4.0	5	20	7	3	s.	J. S. Collier.
Melstone	Musselshell	2,903	2	50.8	.....	72	9	29	15	32	2.13	.....	0.78	T.	7	16	2	12	s.	A. F. Warner.
Mildred	Custer		3	.....	.....	.....	.....	.....	.....	.....	3.94	.....	2.04	8.0	8	12	14	4	nw.	Leon B. Clark.
Miles City	...do	2,371	20	48.2	+ 3.5	82	10	21	16	42	2.48	+ 1.30	1.66	11.0	8	11	13	6	se.	U. S. Weather Bureau.
Norris	Madison	4,845	5	43.1	.....	68	8	25	1	33	1.71	.....	0.47	8.0	10	10	4	16	s.	Madison River Power Co.
Nye	Sweet Grass		3	37.6	.....	65	9	8	23	48	5.88	.....	4.15	66.0	9	17	3	10	sw.	F. L. Bryant.
Olsen Creek	Jefferson	6,345	3	.....	.....	.....	.....	.....	.....	.....	0.56	.....	0.19	3.0	7	7	7	16	w.	Robert Olsen.
Pinegrove	Musselshell			.....	.....	.....	.....	.....	.....	.....	1.05	.....	0.50	.....	6	16	7	7	nw.	G. A. Woodcock.
Pipestone Pass	Jefferson	7,000	3	.....	.....	.....	.....	.....	.....	.....	2.22	.....	0.45	18.0	13	6	11	13	e.	Mrs. T. Keirmeyer.
Plevna	Custer	2,757	....	44.3	.....	79	10	19	15	52	2.34	.....	0.95	6.0	9	13	7	10	w.	C. C. Conser.
Poplar	Valley	2,020	26	47.0	+ 5.0	75	9	21	21	46	0.34	− 0.67	0.27	T.	2	23	2	5	w.	H. M. Cosier.
Red Lodge	Carbon	5,548	12	37.8	− 0.2	64	9	15	22	42	3.10	+ 0.37	1.69	26.1	9	8	10	12	se.	I. A. Draper.
Renova	Jefferson	4,383	13	44.0	+ 2.1	73	9	17	6	45	1.11	− 0.18	0.21	0.5	9	10	4	16	sw.	F. B. Elmer.
Ryegate	Musselshell	3,640	2	43.9	.....	74	9†	19	7	53	1.08	.....	0.50	.....	5	20	2	8	w.	H. Scherfenberg.
Savage	Dawson	2,050	6	47.6	.....	79	9	22	1†	43	2.39	.....	1.22	2.0	6	14	7	9	e.	U. S. Reclamation Service.
Seville	Teton	3,980	3	41.8	.....	78	9	12	4†	40	0.20	.....	0.09	0.7	6	16	6	8	w.	Do.
Shelby	...do	3,276	....	42.6	.....	69	19	28	5†	35	0.51	.....	0.16	T.	5	.....	.....	.....	n.	C. D. Kicher.
Sidney	Dawson		1	44.9	.....	74	9	21	15†	38	3.69	.....	1.75	2.0	5	18	2	10	e.	Fred W. Arndt.
Spokane Ranch	Lewis and Clark		1	.....	.....	.....	.....	.....	.....	.....	0.83	.....	0.48	2.0	7	9	15	6	.....	O. E. Penwell.
Springbrook	Dawson		10	45.6	+ 3.8	77	9	16	15	42	2.12	+ 0.89	0.95	6.5	6	15	9	6	sw.	Mrs. H. L. Miller.
Stearns	Lewis and Clark	4,500	2	.....	.....	.....	.....	.....	.....	.....	2.90	.....	0.69	5.0	8	13	10	7	sw.	J. W. Hardgrove.
Sunlit Farm	Blaine		1	42.7	.....	67	9	15	15	34	1.22	.....	0.30	6.0	6	17	7	6	e.	C. R. Noyes.
Sun River Canyon	Teton	4,650	....	40.6	.....	69	8	10	6	46	1.81	.....	0.55	T.	11	1	16	13	w.	U. S. Reclamation Service.
Three Forks	Gallatin	4,066	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. S. Carpenter.
Trail Creek	Park	6,000	3	.....	.....	.....	.....	.....	.....	.....	2.21	.....	0.77	23.5	11	20	4	6	w.	A. Weidenbauer.
Twin Bridges	Madison	4,650		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. W. Hines.
Utica	Fergus	5,000	17	43.2	+ 2.9	70	10	19	6	37	1.27	+ 0.10	0.50	.....	7	12	2	16	w.	P. W. Korell.
Valentine	...do		5	45.2	.....	78	10	23	15	48	0.61	.....	0.33	.....	2	22	3	5	w.	B. M. Bean.
Valier	Teton			44.2	.....	73	10	19	6	40	0.29	.....	0.16	2.5	5	14	12	4	w.	H. J. Saunders.
Virginia City	Madison	5,880	23	39.8	+ 0.5	67	8	17	6	44	1.56	+ 0.30	0.96	19.4	9	14	5	11	e.	W. R. Baker.
Wall Rock Mountain	Broadwater	5,600	3	.....	.....	.....	.....	.....	.....	.....	1.68	.....	0.27	.....	14	11	16	3	nw.	D. L. Doig.
Warm Springs Creek	Madison	7,500	2	.....	.....	.....	.....	.....	.....	.....	2.06	.....	0.64	24.9	16	4	2	24	sw.	M. D. Lytle.
Wheaton	Musselshell			47.2	.....	75	10	24	21	45	0.36	.....	0.19	.....	4	13	14	3	sw.	P. O. Balgord.
White Sulphur Springs	Meagher			41.4	.....	67	9	14	6	40	1.11	.....	0.39	4.0	8	3	21	6	.....	P. R. Wild.
Wilder	Fergus		1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Rogers.
Wolf Creek	Lewis and Clark	4,000	8	47.7	.....	75	9†	23	6	43	1.75	.....	0.39	0	10	8	17	5	w.	A. J. Reed.
Woodville	Jefferson	6,376	3	.....	.....	.....	.....	.....	.....	.....	1.18	.....	0.23	10.1	14	5	21	4	e.	Anna Kinman.
North Dakota.																				
Aplin	Oliver	.....	6	45.5	.....	77	4	18	16	46	1.83	.....	0.40	0.5	12	13	7	10	nw.	J. C. Hagelbarger.
Arnegard	McKenzie			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. B. Waterman.
Ashley	McIntosh	2,001	17	46.2	+ 4.5	78	10	24	1†	39	3.11	+ 0.96	1.77	T.	6	17	8	5	e.	R. C. Miles.
Beach	Billings	2,576	6	44.4	.....	77	9	13	15	44	2.71	.....	1.11	0	11	17	4	9	sw.	D. J. Steiner.
Belfield	Stark	2,583	1	.....	.....	.....	.....	.....	.....	.....	3.63	.....	1.47	6.0	10	8	11	11	nw.	W. F. Goblus.
Berthold Agency	McLean	2,082	16	45.0	+ 1.5	78a	9	18a	21	47a	1.84	+ 0.48	1.10	0.5	7	16	4	10	n.	C. L. Hall.
Bismarck	Burleigh	1,674	38	46.6	+ 4.0	78	10	23	21	44	2.30	+ 0.42	1.31	0.1	9	12	9	9	nw.	U. S. Weather Bureau.
Bowman	Bowman			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. R. Workman.

TABLE 1.—*Climatological data for April, 1912. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
North Dakota—Contd.																				
Broncho	Mercer	.....	5	45.8	.....	74	10†	27	19	46	2.00	.....	1.15	0	3	0	23	7	nw.	E. M. Walker.
Buford	Williams	1,944	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Maurice Funk.
Carson	Morton	.....	.....	47.6	.....	82	4†	20	2†	56	1.32	.....	0.72	0	4	17	10	3	.....	D. J. Basquin.
Dickinson	Stark	2,543	20	44.4	+ 1.8	75	4†	17	15	44	2.42	+ 1.25	0.76	1.7	8	8	12	10	nw.	L. R. Waldron.
Edgeley	Lamoure	1,468	11	45.6	+ 5.1	81	4†	21	7	57	2.82	+ 0.83	2.00	0	4	5	14	11	nw.	O. A. Thompson.
Energy	McLean	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.10	.....	0.40	T.	5	14	3	13	nw.	T. L. Stanley.
Epping	Williams	.....	5	.....	.....	.....	.....	.....	.....	.....	1.44	.....	0.65	1.5	7	17	4	9	e.	M. E. Uggen.
Fullerton	Dickey	1,439	14	46.6	+ 4.8	79	4†	22	7	46	3.15	+ 1.24	2.45	0	5	19	6	5	s.	F. O. Ailn.
Garrison	McLean	1,901	3	44.7	+ 2.9	74	3†	20	21	42	1.89	+ 0.93	0.63	0	5	14	10	6	se.	G. L. Robinson.
Grinnell	Mountrail	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. W. Hannah.
Hettinger	Adams	2,253	6	45.9	.....	81	10	22	22	44	1.17	.....	0.40	T.	5	15	7	8	nw.	W. R. Lanxon.
Howard (near)	Divide	2,275	6	41.6	.....	72	9	14	16	36	2.02	.....	1.10	2.5	4	16	6	8	nw.	C. P. Amsbaugh.
Jamestown	Stutsman	1,390	25	44.0	+ 1.7	79	4	13	1†	61	2.74	+ 0.94	1.25	0	5	14	9	7	w.	Thos. Pettigrew.
Lamoine	Kidder	.....	5	44.4	.....	80	5	16	16	45	2.31	.....	1.22	2.0	7	14	8	8	ne.	E. V. Virgin.
McHenry (near)	Eddy	1,509	3	43.6	.....	74	4	2	28	52	2.81	.....	0.97	2.5	10	14	7	9	nw.	John Knox.
Marmarth (near)	Bowman	.....	5	.....	.....	.....	.....	.....	.....	.....	1.95	.....	0.80	4.0	7	9	7	14	nw.	S. P. Grane.
Marstonmoor	Stutsman	.....	5	43.0	.....	76	4	11	29	51	3.92	.....	2.30	T.	5	12	13	5	sw.	H. H. McCumber.
Medora	Billings	2,225	16	48.7	+ 4.9	76	8	20	1	38	1.68	+ 1.02	1.38	3.5	3	.....	.....	.....	ne.	J. W. Hesser.
Melville	Foster	1,590	15	47.4	+ 9.0	80[b]	5†	18[b]	22	43[b]	3.20	+ 2.39	1.57	T.	4	.....	.....	.....	nw.	J. P. Kidder.
Mott	Hettinger	.....	6	45.7	.....	80	10	22	15†	46	2.36	.....	1.58	0	10	12	7	11	n.	O. H. Opland.
Napoleon	Logan	1,955	21	45.6	+ 4.5	82	10	17	16	47	1.63	− 0.23	0.66	T.	9	13	3	14	se.	C. J. Hoof.
New England	Hettinger	2,400	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. McKenzie.
New Rockford	Eddy	1,531	3	.....	.....	.....	.....	.....	.....	.....	4.79	.....	1.07	1.4	9	.....	.....	.....	.....	J. V. M. Sundberg.
New Salem	Morton	2,163	6	45.2	.....	75	25†	18	21	40	1.74	.....	0.72	0.5	9	10	14	6	nw.	J. Christiansen.
Orange	Adams	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. E. Goforth.
Reeder	do	.....	.....	46.5	.....	82	10	22	7	50	2.37	.....	1.35	T.	5	17	10	3	nw.	A. O. Lawrence.
Steele	Kidder	1,857	17	.....	.....	.....	.....	.....	.....	.....	2.68	+ 1.72	0.64	0.2	6	12	18	0	w.	E. J. G. Reid.
Washburn	McLean	1,731	9	45.8	.....	75	4	20	16†	40	0.95	.....	0.40	0	3	11	15	4	w.	W. R. Peterson.
Williston	Williams	1,875	33	44.9	+ 4.4	75	9	12	15	34	1.86	+ 0.63	0.95	4.0	9	7	14	9	n.	U. S. Weather Bureau.
South Dakota.																				
Aberdeen	Brown	1,300	22	48.4	+ 4.0	84	4†	22	7	56	6.85	+ 3.64	3.65	.....	6	24	4	2	s.	D. G. Gallett.
Academy	Charles Mix	.....	13	51.2	+ 3.6	82	8	24	1†	43	4.17	+ 1.91	1.75	2.0	10	16	7	7	se.	I. T. Lothrop.
Alexandria	Hanson	1,352	23	50.6	+ 3.3	84	4	20	7	47	4.28	+ 1.46	1.83	.....	4	12	8	10	s.	Albert Hill.
Ardmore	Fall River	3,557	3	.....	.....	.....	.....	.....	.....	.....	2.15	.....	1.00	1.5	4	18	11	1	.....	C., B. & Q. R. R. Co.
Armour	Douglas	1,521	16	49.0	+ 1.8	84[a]	4	14[a]	18	51[a]	.....	.....	.....	.....	.....	13	10	7	s.	T. J. Markey.
Bellefourche	Butte	3,000	4	46.8	.....	77	10	24	7	47	2.05	.....	1.20	.....	5	6	18	6	nw.	U. S. Reclamation Service.
Brookings	Brookings	1,636	23	47.2	+ 2.4	81	5	16	6	62	3.36	+ 1.34	1.35	.....	9	11	13	6	nw.	Experiment Station.
Bryant	Hamlin	1,846	.....	.....	.....	.....	.....	.....	.....	.....	4.64	.....	3.40	0	9	16	8	6	s.	J. W. Ault.
Camp Crook	Harding	3,000	20	46.6	+ 3.1	79	10	24	7	44	1.59	+ 0.55	0.64	5.0	8	14	7	9	sw.	U. S. Forest Service.
Canton	Lincoln	1,248	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John H. Holsey.
Cascade Springs	Fall River	3,422	4	47.4	.....	76	8	21	1†	50	2.83	.....	1.68	.....	5	14	11	5	nw.	Fred Noerenberg.
Castlewood	Hamlin	1,685	6	46.5	.....	79	4†	18	7	49	4.46	.....	2.48	T.	10	9	2	19	s.	M. N. Bradley.
Centerville	Turner	1,229	15	49.5	.....	84	5	22	7	45	2.39	+ 0.53	1.19	.....	6	3	12	15	se.	Frank Williams.
Chamberlain	Brule	1,363	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. B. Van Horn.
Clark	Clark	1,779	18	47.0	+ 2.2	80	4†	19	17	54	4.26	+ 2.40	2.78	.....	10	12	1	7	se.	O. H. La Craft.
Cottonwood	Stanley	2,414	4	49.0	.....	78[a]	4	20[a]	7†	40	3.32	.....	1.40	T.	10	13	14	3	se.	Experiment Station.
Custer	Custer	5,316	.....	.....	.....	.....	.....	.....	.....	.....	1.73	.....	1.30	.....	3	12	13	5	w.	R. P. Imes.
Davis ton	Perkins	.....	3	46.6	.....	79	10	23	7†	45	1.06	.....	0.37	T.	7	7	14	9	nw.	P. A. Sattler.
Deadwood	Lawrence	4,535	3	41.8	.....	70	10	15	16†	47	4.60	.....	1.10	20.8	9	18	3	9	.....	R. E. Grimshaw.
Deerfield	Pennington	6,000	3	.....	.....	.....	.....	.....	.....	.....	1.84	.....	0.82	15.7	14	13	11	6	sw.	Frank E. Miller.
De Smet	Kingsbury	1,726	19	48.4[a]	+ 3.8	80[a]	4†	22[a]	7	51[a]	6.07	+ 3.96	4.00	.....	7	14	6	10	se.	J. O. Purintun.
Dowling	Stanley	2,250	3	49.6	.....	81	10	20	15†	41	1.65	.....	0.60	T.	6	13	12	5	nw.	M. P. Dowling.
Dumont	Lawrence	6,195	3	.....	.....	.....	.....	.....	.....	.....	5.04	.....	1.52	30.0	13	13	8	9	nw.	A. B. Wood.
Eagle Butte	Dewey	2,415	.....	48.2	.....	79	8†	23	16†	43	1.24	.....	0.45	.....	6	22	7	1	.....	Dr. John F. Chandler.
Eales	Potter	.....	1	.....	.....	.....	.....	.....	.....	.....	1.52	.....	0.80	T.	6	17	7	6	se.	A. H. Peterson.
Edson	Meade	.....	1	48.4	.....	80	10	23	6	38	1.56	.....	0.45	.....	5	19	5	6	nw.	J. C. Stoner.
Elk Mountain	Custer	4,700	3	.....	.....	.....	.....	.....	.....	.....	1.53	.....	0.83	6.0	6	14	8	8	nw.	James E. Blaine.
Ellingson	Perkins	.....	.....	46.8	.....	81	10	21	21	52	1.38	.....	0.44	T.	6	9	15	6	nw.	Carl G. Moen.
Englewood	Lawrence	5,723	3	.....	.....	.....	.....	.....	.....	.....	2.28	.....	0.70	20.2	6	12	12	6	s.	T. J. Cummins.
Eureka	McPherson	1,884	3	47.6	.....	84	10	22	1†	45	1.29	.....	0.60	.....	7	12	17	1	se.	Experiment Station.
Fairfax	Gregory	.....	8	50.4	.....	84	4	25	7	49	2.59	.....	1.08	.....	7	18	9	3	sw.	U. G. Stevenson.
Faulkton	Faulk	1,595	17	49.8	+ 4.9	80	4†	22	7	54	2.74	+ 0.20	1.45	.....	6	17	5	8	se.	Miss Belle Talcott.
Flandreau	Moody	1,565	22	48.8	+ 3.1	81	5	21	7	42	3.85	+ 1.39	1.25	0	7	15	5	10	s.	W. A. Harris.
Forestburg	Sanborn	1,231	20	49.8	+ 3.5	85	8	21	7	51	4.95	+ 2.62	2.17	.....	8	16	10	4	se.	S. S. Judy.
Fort Meade	Meade	3,624	29	46.4	+ 1.1	77	9	20	7†	42	2.90	+ 0.57	1.00	12.0	5	13	6	11	w.	Post Hospital.
Frederick	Brown	1,371	3	.....	.....	.....	.....	.....	.....	.....	4.10	.....	2.03	.....	4	14	6	10	nw.	J. E. Jeffers.
Gannvalley	Buffalo	.....	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Hanson.
Greenmont	Lawrence	6,430	3	.....	.....	.....	.....	.....	.....	.....	4.20	.....	3.00	39.0	6	.....	.....	.....	.....	H. C. Hoffbuhr.
Greenwood	Charles Mix	.....	20	51.6	+ 1.8	83	5	23	7	41	3.35	+ 0.72	1.60	.....	8	15	8	7	se.	T. C. Williamson.
Hardingrove	Stanley	.....	.....	49.2	.....	80[a]	3†	23[a]	6	48	2.08	.....	0.65	.....	7	6	17	7	sw.	Mrs. Laura Sinclair.
Hardy Ranger Sta	Lawrence	6,600	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Elizabeth M. Reed.
Harveys Ranch	do	6,282	2	.....	.....	.....	.....	.....	.....	.....	7.26	.....	2.40	46.4	6	16	6	8	w.	Jerome Harvey.
Hermosa	Custer	3,278	6	49.0	.....	76	4†	24	6	39	1.55	.....	0.81	0.5	6	20	7	3	s.	S. M. Booth.
Highmore	Hyde	1,890	16	49.0	+ 2.6	81	8	20	7	45	1.05	− 0.70	0.30	.....	8	16	8	6	se.	Experiment Station.
Hopewell	Stanley	.....	2	49.8	.....	82	8	24	1†	45	1.81	.....	0.61	T.	5	13	12	5	se.	E. R. Myers.
Howard	Miner	1,504	20	46.0	+ 0.4	78[a]	5	17[a]	7	43[a]	5.21	+ 3.31	2.52	.....	8	12	7	11	se.	J. J. Cox.
Howell	Hand	.....	10	48.2	+ 4.1	86	8	20	7	64	2.97	+ 1.73	1.22	T.	8	16	6	8	se.	M. A. Shuster, jr.
Huron	Beadle	1,306	30	48.4	+ 3.8	81	4	16	1	47	3.76	+ 1.11	1.64	0.1	12	13	8	9	se.	U. S. Weather Bureau.
Ipswich	Edmunds	1,530	15	48.7	+ 4.7	82	4†	25	1†	50	1.94	− 0.09	1.15	.....	4	19	7	4	se.	J. B. Taylor.
Kadoka	Stanley	2,467	3	50.2	.....	89	10	24	1†	51	2.86	.....	0.88	T.	6	12	12	6	nw.	Rev. D. S. Brown.
Kennebec	Lyman	1,689	19	51.2	+ 4.0	84	4†	22[b]	2†	50[b]	1.00	− 1.07	0.40	0.5	7	20	4	6	se.	R. C. Van Horn.
Kidder	Marshall	1,295	8	47.0	.....	85	10	21	7	52	3.30	.....	2.50	.....	4	20	1	9	s.	H. C. Schussler.
Kimball	Brule	1,788	23	49.6	+ 2.5	82	8	25	22	46	2.00	− 0.18	0.73	.....	8	15	8	7	se.	G. D. Rose.
La Delle	Spink	1,400	15	49.7	+ 4.6	85	5	22	7†	45	5.28	+ 3.16	2.65	0	10	12	8	10	se.	E. L. Ebbert.
Lead	Lawrence	5,200	3	42.0	.....	65	10	19	16†	40	4.22	.....	1.56	29.0	10	12	8	10	.....	E. F. Irwin.
Lemmon	Perkins	2,345	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	O. C. Olsen.
Manderson	Shannon	.....	8	49.0	.....	78	10	20	1	49	3.37	.....	1.19	2.5	8	15	7	8	s.	W. A. Spencer.
Marion	Turner	1,447	11	51.1	+ 3.9	83	5	28	18	44	3.88	+ 2.15	1.39	.....	8	10	13	7	se.	M. H. Dains.
Marston	Sully	.....	4	48.6	.....	82[a]	4†	20	1†	55	1.85	.....	0.80	T.	5	18	9	3	se.	John S. Walker.
Melette	Spink	1,300	17	49.0	+ 4.0	82	4†	22	1†	51	4.20	+ 2.26	2.85	.....	6	15	6	9	se.	Frank A. Howe.
Menno	Hutchinson	1,325	15	50.2	+ 2.7	82	7	21	7	61	3.40	+ 1.70	1.75	0	4	13	10	7	se.	H. G. A. Winter.
Milbank	Grant	1,148	21	46.8	+ 2.8	83	4	17	1	55	4.40	+ 2.28	1.58	.....	8	18	1	11	nw.	I. T. Patridge.
Mitchell	Davison	1,312	18	49.3	+ 2.8	84	4	25	7	48	3.96	+ 1.29	1.55	.....	7	16	7	7	s.	C. W. Downey.
Mobridge	Walworth	.....	1	.....	.....	.....	.....	.....	.....	.....	2.65	.....	1.20	.....	7	18	9	3	nw.	Thomas J. Morris.
Murdo	Lyman	2,300	4	50.5	.....	80	4†	20	1	47	3.55	.....	3.00	.....	3	21	5	4	nw.	L. C. Bode.
Oelrichs	Fall River	3,339	20	48.2	+ 2.2	76	8†	19	7	53	4.26	+ 2.34	.....	.....	7	10	17	3	sw.	J. E. Strouse.

TABLE 1.—*Climatological data for April, 1912. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
***South Dakota*—Contd.**																				
Onaka	Faulk	1,600									3.11		0.68		8	15	5	10	nw.	H. P. Camp.
Orman	Butte	2,920	6	47.4		78	10	15	6	47	2.18		1.86	0.5	5	13	9	8	w.	U. S. Reclamation Service.
Ottumwa	Stanley		4	47.6		80[b]	5†	20[b]	1†	54[b]	2.72		1.10	T.	5	15	10	5	se.	J. W. Bretz.
Parkston	Hutchinson	1,400									5.32		2.27		8	9	13	8		W. C. Rempfer.
Pierre	Hughes	1,572	20	50.8	+ 4.4	81	4	25	1	45	0.89	− 1.09	0.44	0	6	10	13	7	se.	U. S. Weather Bureau.
Plankington	Aurora	1,528	18								4.71	+ 2.49	2.05	T.	8	11	16	3	nw.	W. G. Andrews.
Pollock	Campbell		6	48.0		84	10	18[a]	22	47[a]	1.32		0.55		6	10	12	8	se.	J. H. Jones.
Rapid City	Pennington	3,251	24	47.3	+ 2.8	73	10	26	7	41	1.01	− 0.69	0.95	2.8	9	12	8	10	w.	U. S. Weather Bureau.
Redfield	Spink	1,295	14	47.8	+ 3.5	83	8	22	1†	51	4.87	+ 3.29	4.00		5	19	1	10	sw.	A. S. Hall.
Rochford	Pennington	5,228	2								2.23		1.00	22.5	8	8	15	6	nw.	Mrs. M. E. Deffenbaugh.
Rosebud	Todd	2,600	18	48.6	+ 1.8	77[b]	8†	21[b]	16†	48[a]	1.57	− 0.61	0.55	4.5	5	12	14	4	sw.	W. M. Ege.
Rosebud Agency	....do	2,600									2.72		0.90		5					C. W. Soldier.
Roslyn	Day		6	45.8		79	4	23	7	45	7.77		3.53	0.2	6	11	11	8	s.	O. O. Floren.
Selby	Walworth		4	48.9		80	10	22	1	40	1.10		0.59		5	15	9	6	nw.	Miss Gertrude Hall.
Sioux Falls	Minnehaha	1,400	21	48.8	+ 2.2	82	4	24	6	40	2.89	+ 0.43	1.14		8	15	4	11	s.	J. H. Bechtold.
Sisseton	Roberts		6	48.4		75	3	24	1	38	6.84		3.66		7	16	0	14	n.	George Gray.
Sorum	Perkins		1	46.3		78	10	20	7	46	1.86		0.65	0.1	6	13	8	9	se.	M. S. Eberhart.
Spearfish	Lawrence	3,647	22	45.4	− 0.2	72	10	21	16	35	2.13	− 0.38	1.00	15.0	6	14	11	5	w.	A. E. Johnson.
Stephan	Hyde	1,840	8	48.0		81	5	21	22	48	1.07		0.48	T.	5	14	6	10	se.	Rev. A. Mattingly.
Tama	Meade		3	49.8		81	10	23	22	50	1.00		0.50		3	13	10	7	nw.	Monte Frank.
Timber Lake	Dewey	2,163		49.6		81	10	23	17	51	0.79		0.44	T.	5	19	9	2	sw.	R. T. Halihan.
Tyndall	Bonhomme	1,418	15	50.5	+ 2.7	84	5	22	7	42	3.09	+ 0.25	1.21	T.	8	15	5	10	sw.	F. F. Chladek.
Vale	Butte	2,765	4	48.5		77	10	22	7	49	2.65		1.61	3.0	10	16	8	6	nw.	U. S. Reclamation Service.
Vermilion	Clay	1,222	11	51.8	+ 3.8	83	5	26	7	41	2.18	+ 0.02	0.98		8	19	3	8	s.	Prof. E. C. Perisho.
Waters Ranch	Lawrence	4,000	2								4.01		2.83	12.5	11	11	6	13	nw.	George Waters.
Watertown	Codington	1,735	18	46.0	+ 2.3	81	4†	18	1	57	5.16	+ 2.87	3.25		9	14	6	10	n.	Robert Q. Wood.
Wentworth	Lake		19	47.6	+ 2.9	80	5	26	1†	46	4.51	+ 2.26	1.44		7	17	7	6	s.	R. C. Zimmerman.
Wessington Springs	Jerauld	1,410	12	49.6	+ 3.0	84	8	22	1†	54	3.42	+ 0.57	1.59	0.1	10	15	9	6	nw.	Mrs. N. J. Dunham.
White Lake	Aurora	1,646	3								2.44		1.00		5	14	9	7	s.	Mrs. G. A. Rogers.
Winner	Tripp	2,500		50.4		83[a]	8	24[a]	17	45[a]	2.35		1.58	3.0	9	14	9	7	s.	J. W. Barnum.
Yankton	Yankton	1,234	38	49.8	+ 2.4	82	5	29	7	34	3.19	+ 0.39	1.60	T.	9	13	6	11	nw.	U. S. Weather Bureau.
Minnesota.																				
Pipestone	Pipestone	1,710	11	46.4	+ 1.9	79	5	22	1	46	2.38	+ 0.79	0.77	0	7	10	13	7	se.	A. L. Doan.
Colorado.																				
Akron	Washington	4,650	10	47.4		78	9	24	1	46	1.88	− 0.22	0.65	0	7					Ira M. Barnhouse.
Albion Lake	Boulder	10,500	2								4.14		1.67	59.0	12	12	0	18	w.	F. R. Dungan.
Arriba	Lincoln	5,243	6	44.6		73	5	20	19	41	1.59		0.61	4.2	8	18	5	7	s.	C. A. Creel.
Auldhurst	Teller	8,500	2								2.48		1.40	20.0	5	6	16	8	s.	Mrs. Alice A. Auld.
Bennett (near)	Arapahoe	5,484	4																	J. F. Egelhoff.
Boulder	Boulder	5,347	16	45.0	− 4.0	73	30	20	1	43	1.71	− 1.31	1.16	T.	8	15	9	6		Otto H. Wangelin.
Burlington	Kit Carson	4,160	9	47.3		77	5	25	1†	39	1.79		0.90	0	6	7	19	4	nw.	W. P. Davis.
Cassells	Park	8,445	2								1.10		0.70	15.2	4	17	4	9	e.	Harriet M. Cassell.
Castle Rock	Douglas	6,220	20	42.7	− 1.7	76	30	18	7†	50	0.93	− 1.13	0.80	6.0	3	20	0	10		Thos. P. Vaughan.
Cheesman	Jefferson	6,860	9	42.0		65	29†	16	2	42	1.28		0.50	7.0	9	6	24	0	s.	J. G. Thornburg.
Cheyenne Wells	Cheyenne	4,279	20	47.6	− 1.2	77	5	21	7	42	0.63	− 1.27	0.22	3.3	5					J. W. Adams.
Cope	Washington		15	49.2	− 1.1	82	4	20	13	45	1.98	− 0.77	0.65	0	5	11	14	5	nw.	Mrs. Dora M. Christopher.
Corona	Grand	11,660	5	18.8		40	7	3	13	30	5.80		0.84	45.0	12				w.	U. S. Weather Bureau.
Denver	Denver	5,272	40	46.4	− 1.3	73	30	23	22	43	0.89	− 1.28	0.60	3.6	8	9	15	6	sw.	Do.
Edgewater	Jefferson	5,450	4																	N. P. Levin, M. D.
Estes Park Fish Hatch.	Larimer	8,000	3								1.82		0.48	22.0	9	2	8	20	w.	G. H. Thomson.
Fort Collins	....do	4,985	33	43.9	− 1.9	72	30	21	7	46	0.90	− 1.20	0.44	0.5	3	7	16	7	nw.	Colorado Agricultural College.
Fort Lupton	Weld	4,907	2								1.33		1.00	9.0	5					R. W. Benedict.
Fort Morgan	Morgan	4,319	14	45.9	− 2.4	77[a]	5	20[a]	7	48[a]	0.49	− 1.23	0.38	0	3				nw.	Miss Della M. Scott.
Frances	Boulder	9,300	7	34.4		64	9†	11	1	46	4.12		1.14	43.2	16	8	16	6	w.	C. W. Barry.
Frys Ranch	Larimer	7,500	2	36.2		62	29	9	22	38	1.61		0.40	15.5	12	8	14	8	w.	Norman W. Fry.
Georgetown	Clear Creek	8,550	10								1.41	− 0.05	0.39	21.1	14	8	13	9		H. L. Corbett.
Greeley	Weld	4,649	21	46.8	− 1.4	76	30	20	7	50	1.61	− 0.08	1.21	4.0	7	18	6	6	ne.	Nelson Reynolds.
Grover (near)	....do	5,076	8																	D. M. Porter.
Hartsel	Park	8,892	3								0.62		0.47	8.9	4	14	5	11	w.	Emily Kleinknecht.
Hawthorne	Boulder	6,000	3								1.79		0.86	6.0	8	12	15	3		B. E. Chesebro.
Holyoke (near)	Phillips	3,745	16								0.91		0.43	0	6	18	8	4	se.	A. C. Cauble.
Idaho Springs	Clear Creek	7,543	12	39.5	− 1.3	64[b]	29	11[b]	1	37[b]	0.94	− 0.94	0.54	7.0	3[b]	12[b]	7[b]	7[b]	w.	J. J. Willis.
Keota	Weld	4,966	1								2.00		1.25	0	4	16	10	4	nw.	I. S. Griffin.
Laporte	Larimer	5,053	21								0.06	− 1.96	0.03	1.0	2					P. A. Taft.
Leroy (near)	Logan	4,380	23								2.62	+ 0.22	1.31	4.6	9					Chas. Green.
Longmont	Boulder	4,950	11	46.2	− 2.6	80	30	20	6	50	1.26		0.80	2.8	6	16	9	5	ne.	Great Western Sugar Co.
Longs Peak (near)	Larimer	8,000	17	29.0	− 4.7	60	24	1	1	48	3.04	+ 0.42	0.75	41.0	9	9	16	5	n.	Enos A. Mills.
Moraine	....do	7,775	22	34.8	− 3.2	58	10	6	22	38	0.50	− 1.59	0.30	8.0	3	16	0	14	w.	Chas. A. Chapman.
Platte Canon	Jefferson	5,492	13								0.60	− 1.98	0.40	7.0	2	13	17	0	sw.	Denver Union Water Co.
St. Cloud	Larimer	7,750	9								1.82		0.38	29.2	15	9	12	9	nw.	Homer C. Pearson
Sedgwick	Sedgwick	3,539	4	46.8		80	8	20	9	50	0.66		0.52	T.	4	10	15	5	sw.	Edwin Lewis, M. D.
Sill Mine	Clear Creek	11,500	3	21.4		42	7†	2	22	29	5.73		1.50	59.0	18	15	8	7	nw.	Chas. F. Deininger.
Spicer (near)	Jackson	8,700	2	32.5		58	28	10	1	37	0.34		0.14	4.6	4	11	8	11	sw.	Frank W. Murphy.
Sterling	Logan	3,892	3	48.3		78	5	22	1	47	1.52		0.67	T.	7	6	8	16	se.	Great Western Sugar Co.
Waterdale	Larimer	5,206	9																	P. H. Boothroyd.
Wray	Yuma	3,512	16	49.4	− 0.6	81	5	21	7	46	1.52	− 0.84	0.70	0	6	11	15	4	e.	J. C. Tuomey.
Yuma	....do	4,138	21								0.86	− 1.30	0.40	0	6	11	13	6	s.	Matthew Harr.
Nebraska.																				
Ainsworth	Brown	2,521	7	48.0		79	5†	24	1†	41	3.72		1.25	2.0	8	5	20	5	sw.	John M. Cotton.
Albion	Boone	1,747	16	48.6[a]	− 0.8	83	5	24	1	43[a]	1.85	− 1.01	0.45	0	6				nw.	F. M. Weitzel.
Alliance	Boxbutte	3,968	19	42.8	− 3.1	70	8†	16	1	42	2.15	+ 0.22	1.00	7.0	4	15	10	5	sw.	J. A. Keegan.
Alma	Harlan	1,939	17	51.9	+ 0.4	84	5†	23	18	47	1.31	− 1.17	0.72	0	5	12	11	7	sw.	W. A. Sharpnack.
Arcadia	Valley	2,186	12								2.02	+ 0.23	0.86	T.	3	5	11	14	nw.	J. L. Owen.
Arden	Wheeler		1								2.24		0.87		7	10	16	4	s.	A. E. Johns.
Ashland	Saunders	1,100	28	52.8	+ 0.6	78	5	30	7	37	1.46	− 1.04	0.59	0	6	17	6	7	sw.	Dr. A. S. von Mansfelde
Ashton	Sherman	2,061	19								2.05	− 0.57	1.31	0	5	14	7	9	nw.	F. Rein.
Atkinson	Holt	2,108	5	48.6		80	4†	24	7	42	2.15		0.65	T.	5	17	7	6	nw.	C. J. Wilson.
Auburn	Nemaha	1,051	21	52.2	+ 0.1	84	5	30	7	40	1.90	− 0.99	0.92	0	7	19	1	10	sw.	J. R. Huffman.
Aurora	Hamilton	1,792	19	50.8	− 0.2	82	5†	28	8†	44	1.34	− 1.24	0.48	0	5	22	1	7		C., B. &Q. R. R. Co.
Beatrice	Gage	1,235	21	53.8	+ 1.5	81	5†	28	18	37	2.04	− 0.25	0.56	0	8	15	5	10	sw.	W. S. Waxham.
Beaver City	Furnas	2,147	21	53.7	+ 1.7	84	5†	20	18	44	1.40	− 0.84	0.60	0	6	9	13	8	se.	T. M. Davis.
Bellevue	Sarpy	1,210	30	52.7		80	5	30	7	35	1.76	− 0.41	0.46	0	7	17	2	11	s.	A. A. Tyler.

TABLE 1.—*Climatological data for April, 1912. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Nebraska—Continued.																				
Benkelman	Dundy	2,968	15	.....	.....	.....	.....	.....	.....	.....	3.99	+ 1.76	2.10	0	3	4	20	6	se.	R. D. Druliner.
Bertrand	Phelps	2,515	4	.....	.....	.....	.....	.....	.....	.....	1.11	.....	0.49	0	6	17	7	6	nw.	W. F. Dobbin.
Blair	Washington	1,122	17	51.6	+ 1.8	79	12	29	1†	38	2.36	− 0.41	0.78	0	8	15	7	8	nw.	D. C. Van Deusen.
Bloomfield	Knox	.....	6	49.6	.....	83	5	22	7	47	2.60	.....	1.10	0	4	9	18	3	s.	Dr. L. C. Bleick.
Bradshaw	York	1,715	14	.....	.....	.....	.....	.....	.....	.....	2.79	+ 0.04	1.38	0	5	20	5	5	.....	E. C. Roggy.
Bridgeport	Morrill	3,658	15	46.4	− 0.8	77	5	22	1	48	2.75	+ 0.75	1.25	0.5	5	12	14	4	nw.	R. H. Willis.
Broken Bow	Custer	2,477	16	46.1	− 1.7	81	5	19	18	49	2.24	+ 0.09	0.62	T.	8	15	3	12	nw.	C., B. & Q. R. R. Co.
Bruning	Thayer	1,583	1	.....	.....	.....	.....	.....	.....	.....	2.14	.....	1.88	0	5	13	10	7	sw.	Henry Middendorf.
Burge	Cherry	2,674	3	47.6	.....	85	10	21	16	50	.....	.....	.....	.....	.....	19	4	7	w.	H. A. Davis.
Butte	Boyd	.....	6	48.6	.....	82	4†	25	1†	44c	3.45	.....	1.10	0	10	15	8	7	nw.	W. Whitla.
Cairo	Hall	1,951	3	.....	.....	.....	.....	.....	.....	.....	2.02	.....	0.82	0	6	.....	.....	.....	.....	Elliott Harrison.
Callaway	Custer	2,555	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Evans.
Cambridge	Furnas	2,258	5	51.0	.....	84	12	19	18	55	1.63	.....	0.96	0	6	14	6	10	sw.	Chas. Jensen.
Columbus	Platte	1,442	19	48.6	− 1.1	80	5	21	2	44	2.26	− 0.26	1.26	0	8	14	3	13	sw.	A. L. Rush.
Crete	Saline	1,368	29	52.3	+ 0.5	80	5†	28	18	40	2.84	+ 0.26	2.42	0	4	15	3	12	s.	Doane College.
Culbertson	Hitchcock	2,565	24	.....	.....	.....	.....	.....	.....	.....	2.48	+ 0.36	0.98	0	5	13	1	16	w.	J. H. Corrick.
Curly	Sioux	.....	3	43.2c	.....	71	8†	18	7	48c	1.48	.....	0.50	.....	7	9	9	12	se.	A. E. Hann.
Curtis	Frontier	2,553	15	49.6	− 1.7	80	13	24	16	42	2.58	+ 0.09	0.98	0	4	11	12	7	s.	Dr. S. R. Razee.
David City	Butler	1,619	22	51.6	+ 1.9	79	5	26	1	38	2.43	− 0.79	1.58	T.	7	11	8	11	se.	S. Clingman.
Du Bois	Pawnee	1,074	7	.....	.....	.....	.....	.....	.....	.....	2.68	.....	0.90	0	7	21	1	8	sw.	O. M. Backus.
Dumas	Garfield	.....	4	46.3	.....	81	5	21	16	41a	1.79	.....	0.65	0	10	15	2	13	sw.	Emile Raes.
Elm Creek	Buffalo	2,268	4	.....	.....	.....	.....	.....	.....	.....	1.87	.....	0.90	0	4	.....	.....	.....	.....	E. L. Sutton.
Elsie	Perkins	3,382	3	.....	.....	.....	.....	.....	.....	.....	2.34	.....	1.55	0	6	.....	.....	.....	.....	J. F. Brittain.
Ericson (near)	Garfield	2,029	19	.....	.....	.....	.....	.....	.....	.....	2.59	− 0.20	0.95	.....	8	.....	.....	.....	se.	J. A. Bodyfield.
Ewing	Holt	1,888	21	48.6	.....	86	5	18	1	49	1.76	− 0.93	0.74	T.	6	.....	.....	.....	.....	G. H. Benson.
Fairbury	Jefferson	1,316	37	53.4	+ 1.4	85	5	29	2†	41	3.81	+ 1.11	1.95	0	7	8	14	8	se.	W. F. Cramb.
Fairmont	Fillmore	1,641	19	49.4	− 0.3	81	12	26	7	44	1.79	− 1.13	1.18	0	6	10	7	13	s.	C., B. & Q. R. R. Co.
Falls City	Richardson	898	17	55.0	+ 1.9	86	5	30	7	40	1.42	− 1.27	0.92	0	2	12	11	7	se.	Dr. J. C. Yutzy.
Fort Robinson	Dawes	3,764	28	40.6	− 5.6	74	8†	16	1	52	2.50	+ 0.82	0.78	.....	9	21	2	7	w.	Post surgeon.
Franklin	Franklin	1,820	23	52.6	+ 0.9	88	5	20	18	51	1.26	− 0.94	0.78	0	6	7	15	8	se.	A. R. Peck.
Fremont	Dodge	1,203	32	52.0	+ 1.8	78	5	27	7	34	2.43	− 0.20	1.80	0	6	9	14	7	nw.	Ernest Hahn.
Fullerton	Nance	1,629	11	50.4	.....	85	5	26	7	45	2.58	+ 0.18	0.90	0	5	15	9	6	nw.	Dr. F. W. Johnson.
Geneva	Fillmore	1,633	21	52.7	+ 0.6	83	5	28	7†	42	1.46	− 1.29	1.12	0	5	11	10	9	se.	F. M. Flory.
Genoa	Nance	1,584	37	50.6	+ 0.9	81	5	26	16	42	1.76	− 1.07	1.02	T.	8	13	12	5	n.	F. W. Parsons.
Gordon	Sheridan	3,550	11	45.3c	.....	79	8	19	7†	51c	1.65	− 0.15	0.50	.....	7	.....	.....	.....	n.	G. F. Williams.
Gosper	Gosper	.....	10	.....	.....	.....	.....	.....	.....	.....	1.87	+ 0.06	0.70	0	6	10	13	7	se.	E. H. Stoll.
Gothenburg	Dawson	2,557	18	49.6	− 1.1	83	4	19	18	48	2.70	+ 0.37	0.95	0	4	12	9	9	se.	Dr. W. J. Bartholomew.
Grand Island	Hall	1,860	21	51.7	+ 1.1	84	5	26	18	41	1.86	− 0.93	0.98	0	7	10	8	12	s.	E. A. Barnes.
Grant	Perkins	3,405	9	47.7	.....	79	5	22	16	46c	0.91	.....	0.37	0	4	11	15	4	nw.	Cyrus Carver.
Greeley	Greeley	2,021	17	48.8	.....	83	5	25	16†	46	1.90	− 0.65	0.87	0	6	7	18	5	se.	W. E. Morgan.
Guide Rock	Webster	1,646	12	.....	.....	.....	.....	.....	.....	.....	1.71	− 0.15	0.72	0	5	10	9	11	s.	J. S. Marsh.
Halsey	Thomas	2,695	10	48.6	0	80	5†	19	18	49	1.71	− 0.83	0.81	0	6	9	14	7	nw.	U. S. Forest Service.
Hartington	Cedar	1,309	20	49.0	+ 1.9	83	5	25	7	40	2.36	− 0.38	1.02	0	6	12	8	10	nw.	D. E. Ewing.
Harvard	Clay	1,812	23	50.1	+ 0.4	81	12	25	18	43	1.82	− 1.09	0.76	0	6	12	9	9	sw.	Bert Gregg.
Hastings	Adams	1,932	21	49.7	− 0.3	83	5	27	1†	44	1.78	− 1.06	0.80	0	3	18	5	7	nw.	C., B. & Q. R. R. Co.
Hayes Center	Hayes	.....	19	48.7	.....	80	5	23	18	44	3.30	+ 0.88	1.90	0	2	17	10	3	n.	C. A. Ready.
Hay Springs	Sheridan	3,821	26	45.2	+ 0.4	75	8	21	7	47	2.68	+ 0.53	0.60	13.0	7	10	14	6	nw.	A. Kadlecek.
Hebron	Thayer	1,458	26	52.4	− 0.4	83	5	27	18	42	2.59	+ 0.18	1.91	0	6	.....	.....	.....	.....	Dr. C. M. Easton.
Hemingford	Boxbutte	4,256	3	.....	.....	.....	.....	.....	.....	.....	2.73	.....	0.56	.....	10	.....	.....	.....	.....	A. S. Enyeart.
Hendley	Furnas	2,231	8	.....	.....	.....	.....	.....	.....	.....	1.45	.....	0.43	0	5	.....	.....	.....	.....	T. L. Jones.
Hershey	Lincoln	2,902	1	.....	.....	.....	.....	.....	.....	.....	2.92	.....	1.30	0	5	16	8	6	.....	G. F. Palmer.
Hillside	McPherson	3,484	3	46.4	.....	77	5	12	19	48	1.39	.....	1.01	2.0	10	12	14	4	nw.	Mrs. M. R. Lloyd.
Holdrege	Phelps	2,324	22	49.8	− 1.1	82	12	23	18	46	1.80	− 0.98	0.95	0	5	14	3	13	nw.	C., B. & Q. R. R. Co.
Hooper	Dodge	1,228	15	50.8	+ 1.4	83	5	24	7	44	2.30	+ 0.15	1.70	0	6	9	8	13	se.	Dr. W. H. Heine.
Hull (near)	Banner	.....	1	.....	.....	.....	.....	.....	.....	.....	2.12	.....	1.11	8.0	5	15	5	10	w.	Mrs. W. P. Miller.
Imperial	Chase	3,278	21	49.1	0	80	5	23	16	43	2.85	+ 0.56	1.82	T.	6	8	14	8	nw.	Robt. Malcolm.
Kearney	Buffalo	2,146	23	51.8	+ 0.2	84	5	26	18	45	1.68	− 0.83	0.82	0	4	18	4	8	se.	City Engineer.
Kimball	Kimball	4,697	24	44.1	− 1.8	74	5	24	6	45	2.16	+ 0.23	0.80	3.0	7	13	13	4	nw.	F. J. Bellows.
Kirkwood	Rock	.....	17	49.2	+ 1.9	84	4	21	1	48	2.55	+ 0.39	0.73	T.	6	14	7	9	sw.	Mrs. C. Arter.
Kowanda	Garden	.....	4	.....	.....	.....	.....	.....	.....	.....	0.92	.....	0.54	.....	6	.....	.....	.....	.....	Geo. W. Hulse.
Lamar	Chase	.....	1	.....	.....	.....	.....	.....	.....	.....	1.22	.....	0.31	0	6	13	11	6	se.	R. L. McGaughey.
Lexington	Dawson	2,385	24	50.4	+ 0.7	82	12	20	18	44	1.14	− 1.04	0.45	0	8	22	0	8	se.	Robt. Chadwick.
Lincoln	Lancaster	1,189	37	52.9	+ 2.2	80	5	30	7	38	2.50	− 0.27	1.93	0	8	8	6	16	s.	U. S. Weather Bureau.
Lodgepole	Cheyenne	3,820	15	46.7	− 0.3	78	5	22	7	49c	1.52	− 0.24	1.20	T.	4	15	9	6	w.	R. T. Kidney.
Loup City	Sherman	2,067	17	49.3	+ 0.2	82	5	22	18	45	1.85	− 0.89	0.98	0	7	18	9	3	nw.	Harriet Hayhurst.
Loyal	Custer	.....	4	.....	.....	.....	.....	.....	.....	.....	4.50	.....	2.60	0	3	19	3	8	n.	C. H. Cass.
McCook	Redwillow	2,506	18	50.0	− 1.2	83	5	16	18	47	2.01	+ 0.10	1.38	0	3	19	7	4	se.	C. G. Coglizer.
McCool Junction	York	1,575	16	.....	.....	.....	.....	.....	.....	.....	2.31	− 0.56	1.27	0	4	.....	.....	.....	.....	L. L. Slagle.
Madison	Madison	1,585	18	49.8	+ 1.5	79	5	25	1	38b	2.92	− 0.05	0.78	T.	7	12	4	14	se.	Dr. F. A. Long.
Marquette	Hamilton	1,830	33	.....	.....	.....	.....	.....	.....	.....	1.83	− 0.75	0.68	0	7	.....	.....	.....	.....	John Ellis.
Mary	Brown	.....	1	.....	.....	.....	.....	.....	.....	.....	2.68	.....	0.95	.....	8	16	9	5	se.	G. C. Stufft.
Mason City	Custer	2,257	12	.....	.....	.....	.....	.....	.....	.....	1.60	− 1.20	0.75	0	4	.....	.....	.....	.....	J. A. Amsberry.
Minatare	Scotts Bluff	3,825	2	.....	.....	.....	.....	.....	.....	.....	2.46	.....	0.88	.....	6	20	7	3	nw.	A. Kennedy.
Minden	Kearney	2,169	35	50.6	+ 0.4	81	5	24	7†	47	2.14	− 1.08	0.83	0	4	10	12	8	se.	Joel Hull.
Mitchell	Scotts Bluff	3,950	3	45.6	.....	74	10	16	1	46	2.02	.....	0.94	0.5	9	11	15	4	nw.	U. S. Reclam. Service.
Nebraska City	Otoe	941	35	53.8	+ 1.2	83	5	31	7	35	2.30	− 0.27	1.20	0	3	18	6	6	s.	C., B. & Q. R. R. Co.
Nelson	Nuckolls	1,683	1	53.4	.....	87	5	27	7	50	1.58	.....	0.86	0	3	8	11	11	sw.	Mack I. Koser.
Norfolk	Madison	1,532	29	49.6	+ 1.9	84	5	24	7	44	2.84	− 0.21	0.92	T.	9	14	7	9	se.	Dr. P. H. Salter.
North Loup	Valley	1,961	24	51.0	+ 0.3	88	5	25	7†	51	2.35	− 0.51	1.00	0	4	10	12	8	sw.	W. G. Rood.
North Platte	Lincoln	2,841	38	48.2	− 0.8	80	5	22	18	44	2.93	+ 0.78	1.66	0.1	6	9	16	5	w.	U. S. Weather Bureau.
Oakdale	Antelope	1,722	25	48.4	0	82	5	22	7	42	2.21	− 0.49	0.84	T.	6	10	9	11	s.	G. S. Clingman.
Omaha	Douglas	1,103	42	52.8	+ 2.3	78	5	31	1	30	1.31	− 1.70	0.70	0	8	5	15	10	s.	U. S. Weather Bureau.
Ord	Valley	2,062	18	.....	.....	.....	.....	.....	.....	.....	2.51	− 0.14	0.97	0	3	5	14	11	.....	Jas. Milford.
Orleans	Harlan	1,993	4	.....	.....	.....	.....	.....	.....	.....	1.81	.....	0.97	0	4	.....	.....	.....	.....	Jas. McGeachin.
Osceola	Polk	1,644	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. T. Ray.
Palisade	Hitchcock	.....	3	.....	.....	.....	.....	.....	.....	.....	2.22	.....	1.27	0	4	.....	.....	.....	.....	E. E. Young.
Palmyra	Otoe	1,142	18	52.6	+ 1.8	78	5†	32	1†	.....	2.03	− 0.32	0.80	0	5	16	9	5	sw.	Thos. Coles.
Pawnee City	Pawnee	1,175	17	53.6	.....	85	5	29	2	40	2.27	− 0.32	1.45	0	5	15	6	9	s.	F. A. Barton.
Paxton	Keith	3,060	.....	.....	.....	.....	.....	.....	.....	.....	1.25	.....	0.35	.....	8	10	17	3	w.	H. D. Lute.
Plymouth	Jefferson	1,419	8	53.0f	.....	81e	5	27	7†	40e	2.20	.....	1.30	0	4	15	8	7	nw.	John Ruppel.
Purdum	Blaine	.....	13	47.8	+ 1.2	78	5†	18	18	47	1.84	− 0.32	0.80	0.3	7	14	9	7	se.	T. C. Jackson.
Ravenna	Buffalo	2,028	35	49.6	− 0.9	84	5	23	16†	46	2.56	− 0.07	0.87	0	6	10	13	7	sw.	H. G. Smith.
Red Cloud	Webster	1,687	21	52.8	+ 0.4	85	5	25	7	48	1.44	− 0.77	1.00	0	6	17	6	7	nw.	Chas. S. Ludlow.
St. Libory	Howard	1,887	17	.....	.....	.....	.....	.....	.....	.....	2.59	− 0.13	0.91	0	7	14	6	10	se.	W. I. Meader.
St. Paul	....do	1,796	18	50.6	+ 0.3	84	5	28	7†	43	2.21	− 0.28	0.80	0	7	18	7	5	nw.	Paul Anderson.
Santee	Knox	.....	24	53.2	+ 3.7	85	5	26	7	43	2.43	− 0.15	0.98	0	8	10	10	10	sw.	Nat H. Neff.

TABLE 1.—*Climatological data for April, 1912. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Nebraska—Continued.																			
Sargent	Custer	2,339																	J. L. Ferguson.
Schuyler	Colfax	1,357	19	51.6	.....	80	5	27	7	36	2.18	− 0.60	0.82	0	8	14	5	11	s.	J. T. Sumner.
Scottsbluff	Scotts Bluff	3,888	6	46.7	.....	75	8	15	1	47	1.63	.....	0.85	3.0	6	16	9	5	nw.	A. B. McCoskey.
Seward	Seward	1,435	22	51.4	− 0.4	81	6	28	6†	53	2.60	− 0.36	2.00	0	3	13	16	1	se.	C., B. & Q. R. R. Co.
Sidney	Cheyenne	4,090	20								2.66	+ 0.86	1.10	5.8	9	21	6	3	nw.	John P. Fischer.
Springfield	Sarpy	1,052	1								1.12	.....	0.53	0	6	10	11	9	se.	L. A. Bates.
Springview	Keyapaha		21	49.8	+ 2.2	86	5	24	18	46	2.49	+ 0.12	1.11	0	7	11	12	7	nw.	C. L. Phelps.
Stanton	Stanton	1,472	21	49.4	+ 0.6	82	5	25	7	40	2.51	− 0.39	1.02	0	7	13	3	14	sw.	Alfred Pont.
Stratton	Hitchcock	2,804	17								3.17	+ 1.07	1.67	0	3					Miss Stella Vennum.
Superior	Nuckolls	1,574	27								1.50	− 1.26	1.30	0	2					F. V. Bishop.
Syracuse	Otoe	1,059	20	53.3	+ 1.5	84	5	29	7	40	1.74	− 0.63	0.53	0	7	17	3	10	sw.	W. N. Hunter.
Table Rock	Pawnee	1,023	24								2.43	− 0.01	0.97	0	8	14	10	6	s.	E. D. Howe.
Tecumseh	Johnson	1,113																		F. B. Thurber.
Tekamah	Burt	1,060	22	51.2	+ 0.2	78	5	29	3	39	2.68	− 0.20	1.44	0	8	6	7	17	sw.	Dr. A. D. Nesbit.
University Farm	Lancaster		35	53.2	+ 0.9	79	6†	28	7	41	2.23	− 0.22	1.71	0	8	8	18	4	.....	S. W. Perin.
Valentine	Cherry	2,613	24	48.2	+ 2.8	79	8	21	18	41	2.36	+ 0.04	1.29	T.	8	16	12	2	nw.	U. S. Weather Bureau.
Wahoo	Saunders	1,187	9								2.09		1.57	0	4	17	12	1	sw.	W. T. Mauck.
Wakefield	Dixon	1,387	18	49.7	+ 1.9	82	5	25	7	40	2.55	− 0.05	0.74	0	7	14	5	11	s.	I. H. Weaver.
Walthill	Thurston		11								2.39	− 0.08	1.10	0	4					A. P. Coleman.
Watertown	Buffalo	2,299	6								1.91	.....	0.97	0	5	9	17	4	sw.	R. E. Swift.
Wauneta	Chase		13								2.82	+ 0.78	1.75	0	3					C. D. Fuller.
Weeping Water	Cass	1,080	35	53.4	.....	84	5	26	7	42	1.77	− 0.72	0.65	0	7	20	0	10	s.	S. W. Orton.
Westpoint	Cuming	1,313	29	52.0	+ 1.8	86	12	27	7	40	2.65	+ 0.07	1.05	0	3	17	7	6	s.	J. C. Elliott.
Wisner	....do	1,380	16								2.85	− 0.26	0.84	0	7	16	9	5	.....	F. C. Evans.
York	York	1,633	26	52.0	− 0.1	84	5	26	17	44	2.33	− 0.91	1.10	0	7	13	9	8	sw.	A. T. Glauque.
Iowa.																				
Afton	Union	1,212	18	50.9	+ 0.5	73	5	30	3	28	5.04	+ 0.67	1.30	0	10	10	12	8	sw.	N. W. Rowell.
Allerton	Wayne		10	51.3	+ 1.0	74	5	29	3	31	2.93	− 0.27	0.65	T.	10	17	4	9	nw.	Mrs. Geo. Shriver.
Alton	Sioux	1,305	7	48.8	.....	77	5	27	7	38	2.24	.....	0.70	0	8	10	9	11	se.	W. S. Slagle.
Atlantic	Cass	1,164	21	51.0	+ 2.3	77	5	29	3†	36	3.59	+ 0.53	1.00	T.	11	7	7	16	ne.	Thos. H. Whitney.
Audubon	Audubon	1,301	18	50.1	+ 1.4	74	5	29	7	31	3.90	+ 0.66	1.00	0	9	11	7	12	sw.	Geo. E. Kellogg.
Bedford	Taylor		12	51.4	+ 2.1	77	5	28	7	37	2.68	− 0.13	0.72	T.	13	14	7	9	se.	E. E. Healy.
Centerville	Appanoose		2	51.2	.....	74	5	28	3	31	2.84	.....	1.00	T.	10	18	6	6	w.	Gordon Peacock, jr.
Chariton	Lucas	1,042	17	49.8	+ 3.3	74	5	27	3	32	3.17	+ 0.04	0.65	1.0	7	9	14	7	sw.	C. C. Burr.
Clarinda	Page	1,009	22	51.6	+ 0.7	80	5	30	7	41	2.61	− 0.58	0.87	0	7					A. S. Van Sandt.
Corning	Adams	1,117	26	51.0	+ 1.2	80	12	28	7	35	4.09	+ 0.96	1.70	0	9	16	4	10	sw.	Jerome Smith.
Corydon	Wayne	1,101	19	51.3	+ 0.3	74	5	29	3	31	2.65	− 0.51	0.73	T.	10	5	13	12	sw.	May C. Miller.
Council Bluffs	Pottawattamie		2	51.2	.....	79	5	27	7	41	1.98	.....	0.64	0	8	8	8	14	sw.	B. W. Crossley.
Creston	Union	1,312	7	48.8	.....	74	5	29	7	34	5.66	.....	1.72	T.	15	10	1	19	sw.	O. J. Colby.
Cumberland	Cass		13								3.15	+ 1.06	0.99	0	8	20	1	9	sw.	J. H. Reppert.
Denison	Crawford	1,180	18	50.2	+ 2.1	75	5	29	7	37	2.31	− 1.14	0.83	0	8	15	9	6	s.	W. C. Van Ness.
Elliott	Montgomery		7	52.4	.....	78	5	30	2†	34	2.43	.....	0.80	0	8	13	13	4	sw.	C. H. Westrope.
Greenfield	Adair		20	50.4	+ 0.6	75	5	28	7	31	3.96	+ 0.78	1.27	T.	9	7	20	3	sw.	R. B. Oldham.
Harlan	Shelby	1,182	13	49.8	+ 1.5	76	5	28	7	34	3.38	+ 0.92	0.88	0	10	7	13	10	nw.	C. A. Reynolds.
Inwood	Lyon	1,474	8	48.2	.....	84	5	24	7	42	1.99	.....	0.90	0	9	17	2	11	se.	F. B. Hanson.
Lamoni	Decatur	1,120	5	50.8	.....	74	5	28	3	31	2.54	.....	0.75	T.	11	17	0	13	se.	T. J. Fitzpatrick.
Larrabee	Cherokee	1,266	22	47.6	+ 0.1	75	5	25	7	37	3.37	+ 0.65	1.55	0	8	13	9	8	sw.	R. C. Carnahan.
Le Mars	Plymouth	1,224	16	49.5	+ 1.5	75	5†	27	7	34	2.14	− 1.05	0.83	0	10	13	9	8	se.	G. A. C. Clarke.
Lenox	Taylor	1,250	17	51.0	+ 1.0	75	5	28	7	32	3.89	+ 0.86	1.22	T.	12	15	7	8	s.	J. L. Hurley.
Leon	Decatur	1,120	10	50.8	− 0.5	74	5	29	3	31	2.78	− 0.64	0.98	T.	7	5	13	12	sw.	Morris Gardner.
Little Sioux	Harrison		7	52.4	.....	77	5†	25	7	36	2.59	.....	1.25	0	8	13	4	13	se.	Geo. H. Gibson.
Logan	....do	928	45	52.2	+ 2.3	77	4†	28	7	32	2.82	+ 0.01	0.72	0	8	9	13	8	sw.	Glenn H. Stern.
Mount Ayr	Ringgold	1,236	19	51.0	+ 0.2	76	5†	29	7	35	3.09	− 0.19	0.97	0	11	11	12	7	sw.	A. F. Beard.
Murray	Clarke		21	50.6	+ 0.9	74	5	28	3	32	4.68	+ 1.45	1.30	0	9	5	17	8	sw.	N. T. Ashley.
Northboro	Page			51.8	.....	81	5	30	7	37	2.61	.....	0.91	1.5	8	11	8	11	se.	J. M. Darby.
Odebolt	Sac		15	50.6	+ 2.5	76	5†	27	7	36	2.68	− 0.04	1.06	0	7	17	4	9	.....	E. Starner.
Onawa	Monona	1,051	12	52.0	+ 2.1	78	5	29	7	36	3.05	+ 0.57	1.15	0	11	13	7	10	se.	C. G. Perkins.
Pacific Junction	Mills	960	13	52.2	+ 2.2	80	5	25	7	40	2.12	− 0.43	1.22	0	7	11	17	2	s.	H. H. McCartney.
Rock Rapids	Lyon	1,358	13	49.0	+ 2.8	81	5	21	7	41	1.72	− 0.95	0.71	0	6	15	3	12	s.	W. C. Wyckoff.
Sheldon	O'Brien	1,422	12	49.9	+ 2.8	76	5	27	7	37	1.78	+ 0.05	0.85	0	4					Geo. Aupperle.
Sibley	Osceola	1,212	19	46.5	+ 0.4	78	5	25	1†	38	2.16	− 0.17	0.87	0	9	15	4	11	s.	H. G. Doolittle.
Sioux Center	Sioux		13	49.4	+ 3.4	76	5	27	7	34	2.07	− 0.13	0.75	T.	5	13	5	12	s.	J. de Ruyter.
Sioux City	Woodbury	1,135	23	50.4	+ 1.9	77	5	29	7	31	1.98	− 0.79	0.89	T.	8	9	10	11	se.	U. S. Weather Bureau.
Spencer	Clay		2	49.5	.....	79	5	28	1	38	3.84	.....	1.42	T.	8				sw.	S. Gillespie.
Thurman	Fremont		15	52.2	+ 1.7	80	5	29	3	39	1.85	− 1.56	0.54	0	7	11	8	11	nw.	C. R. Paul.
Washta	Cherokee	1,157	14	49.4	+ 2.9	78	5	25	7	40	3.31	+ 1.21	1.20	0	6	17	4	9	s.	H. L. Felter.
Kansas.																				
Abilene	Dickinson	1,157	17								0.92	− 1.74	0.30	0	6	10	10	10	s.	T. W. Sherman.
Agricultural College	Riley	1,100	54	55.4	+ 0.9	85	5	28	7	44	1.40	− 1.32	0.50	0	6	17	4	9	s.	Prof. J. O. Hamilton.
Alton	Osborne	1,651	10	54.3	.....	90	5	24	18	46	2.29	− 0.08	1.06	0	5	10	10	10	s.	H. A. Storer.
Atchison	Atchison	973	21	54.3	− 0.2	82	5	31	7	37	1.30	− 2.45	0.50	0	6	13	9	8	s.	Prof. M. F. Troxell.
Beloit	Mitchell	1,383	17	54.0	.....	88	5	26	7	47	1.63	− 0.73	0.58	0	5	5	16	9	se.	F. A. Slack.
Blakeman	Rawlins	2,894	15	49.4	.....	82	5	20	7†	49	1.53	− 0.85	0.66	0	5	15	7	8	se.	C. L. Henderson.
Blue Rapids	Marshall	1,105	6								1.58	.....	0.59	0	7	15	1	14	.....	M. Norton.
Centralia	Nemaha	1,256	3	53.0	.....	90	11	28	7	47	3.75	.....	1.14	0	10	12	11	7	nw.	N. S. Hazen.
Chapman	Dickinson	1,113	8	57.4	.....	86	12	30	7	43	1.23	.....	0.63	0	4	20	4	6	s.	Dr. R. McShea.
Clay Center	Clay	1,203	11	54.9	.....	87	12	27	7†	42	1.40	− 0.58	1.00	0	3	8	1	21	s.	O. L. Slade.
Colby	Thomas	3,138	21	51.4	+ 0.6	83	5	22	18	44	0.98	− 1.32	0.88	0	3	12[a]	14[a]	3[a]	sw.	G. H. Kinkel.
Concordia	Cloud	1,398	28	54.1	+ 0.5	87	5	29	18	39	1.35	− 1.07	0.93	0	6	9	10	11	s.	U. S. Weather Bureau.
Densmore	Norton	2,200	3	53.2	.....	85	5	22	18	46	1.09	.....	0.67	0	4	5	10	15	nw.	J. J. Griffith.
Dresden	Decatur	2,731	18	49.6	− 1.4	83	5	20	18	46	0.94	− 2.25	0.32	0	5	13	4	13	nw.	Jacob Bock.
Ellsworth	Ellsworth	1,537	8	53.8	.....	88	5	22	18	45	1.24	.....	0.93	0	3	9	10	11	s.	Geo. Seitz.
Enterprise	Dickinson	1,144	10	57.2	.....	86	5†	30	7†	43	1.66	− 1.00	0.79	0	6	15	5	10	s.	J. R. Clark.
Eskridge	Wabaunsee	1,412	6	54.6	.....	81	12	31	7†	32	2.38	.....	0.71	0	6	15	7	8	s.	Geo. D. West.
Farnsworth	Lane	2,850	11	52.0	− 0.5	87	5	16	18	50	1.58	− 0.56	0.79	T.	3	21	2	7	sw.	C. M. Jennison.
Fort Scott	Bourbon	857	37	55.0	+ 0.4	79	30	35	23	39	7.24	+ 3.18	2.86	0	11	18	10	2	sw.	E. A. Shaver.
Frankfort	Marshall	1,146	18	54.9	+ 0.8	82	5†	32	7†	42	1.91	− 1.59	0.76	0	8	15	9	6	sw.	W. W. Watson.
Garnett	Anderson	950	6	55.8	.....	76	5	34	7†	35	4.73	.....	1.93	0	10	6	16	8	s.	D. D. Judy.
Goodland	Sherman	3,687	5																	C. C. Calvert.
Gove	Gove	2,750	23																	Jesse Royer.
Hanover	Washington	1,225	15	53.0	.....	88	5	29	7	46	1.75	− 1.30	0.67	0	7	12	7	11	s.	A. Jaedicke, jr.
Harrison	Jewell	1,804	11	53.1	+ 1.5	85	5	28	7	45	3.00	+ 0.99	1.90	0	5	14	10	6	s.	Mahlon Tegley.
Hays	Ellis	2,000	44	52.8	− 0.6	87	5	18	18	43	1.66	− 0.68	1.01	T.	5	11	7	12	nw.	G. K. Helder.

TABLE 1.—*Climatological data for April, 1912. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
***Kansas*—Continued.**																				
Hill City	Graham	2,134	4	54.0	.....	86	5	20	18	46	1.13	.....	0.96	0	2	11	11	8	s.	C. A. G. Inlow.
Horton	Brown	1,188	23	52.5	− 1.7	81	12	31	7	40	1.93	− 1.03	0.57	0	9	10	5	15	s.	Mrs. S. C. Belden.
Hoxie	Sheridan	2,700	14	51.3	− 0.8	84	5	18	15	46	0.69	− 1.61	0.44	0	2	6	16	8	se.	I. L. Vinson.
Lawrence	Douglas	997	44	54.7	− 0.1	78	12	32	7	35	1.26	− 1.80	0.35	0	7	13	9	8	sw.	Prof. H. P. Cady.
Leavenworth	Leavenworth	913	68	55.0	+ 0.6	82	12	33	6	30	1.42	− 1.59	0.52	T.	7	17	5	8	nw.	Dr. A. F. Yohe.
Lebanon	Smith	1,812	14	53.5	+ 1.7	84	5	26	18	40	0.95	− 0.88	0.85	0	2	13	0	17	s.	E. V. Bower.
Leoti	Wichita	3,300	9	49.8	.....	83	5	21	7	52	0.30	.....	0.26	T.	3	13	14	3	n.	Fred Burnham.
Lincoln	Lincoln	1,374	....	55.1	.....	90	5	24	18	43	1.81	.....	1.28	0	3	10	11	9	se.	R. W. Greene.
Lindsborg	McPherson	1,333	6	.....	.....	.....	.....	.....	.....	.....	0.21	.....	0.09	0	3	10	4	16	s.	A. J. Fredrickson.
McCracken	Rush	2,139	....	53.2	.....	85	5†	19	18	46	1.88	.....	1.40	0	5	15	5	10	sw.	E. D. Floyd.
Minneapolis	Ottawa	1,259	22	54.9	0.0	83	5	28	18	40	1.79	− 0.36	1.59	0	8	12	8	10	s.	J. L. Steele.
Moran	Allen	1,098	16	56.3	+ 0.8	81	12	25	2	37	6.62	+ 3.15	2.20	0	9	13	9	8	sw.	C. J. Norton.
Natoma	Osborne	1,834	3	.....	.....	.....	.....	.....	.....	.....	3.10	.....	1.60	0	2	13	5	12	se.	C. O. Hunt.
Norton	Norton	2,284	14	53.0	+ 1.7	84	12	25	17	38	1.34	− 1.81	0.65	0	3	19	6	5	se.	Sim Sleffel.
Oberlin	Decatur	2,539	25	.....	.....	.....	.....	.....	.....	.....	0.96	− 2.06	0.58	0	5	4	11	15	nw.	I. K. Huber.
Oketo	Marshall	1,194	4	53.6	.....	85	5	32	1†	36	2.19	.....	1.31	0	7	4	20	6	nw.	J. A. Church.
Olathe	Johnson	1,032	17	55.4	+ 1.4	81	12	27	16	40	2.06	− 1.26	0.85	0	7	13	8	9	se.	Dr. S. B. S. Wilson.
Ottawa	Franklin	926	18	55.8	+ 1.6	80	12	33	17†	42	2.24	− 0.90	0.90	0	7	16	7	7	s.	W. J. Sheldon.
Phillipsburg	Phillips	1,939	21	53.4	+ 0.6	85	4†	24	18	44	2.88	+ 0.60	1.66	0	5	10	11	9	nw.	N. E. Bailey.
Plainville	Rooks	2,156	6	.....	.....	.....	.....	.....	.....	.....	1.50	.....	0.75	0	4	18	8	4	se.	P. D. Spellman.
Pleasanton	Linn	862	10	56.9	+ 1.6	78	12	36	7†	35	5.92	+ 2.22	2.08	0	10	19	3	8	sw.	B. F. Blaker.
Quenemo	Osage	941	....	.....	.....	.....	.....	.....	.....	.....	2.11	.....	0.57	0	8	18	5	7	sw.	R. L. Graham.
Republic	Republic	1,495	9	53.0	.....	87	5	25	18	45	2.76	.....	1.82	0	5	....	.....	.....	.....	J. W. Ambrose.
Russell	Russell	1,534	13	54.8	+ 1.2	86	5†	24	18	41	2.47	− 0.59	2.15	0	3	13	7	10	se.	Robert Brehner.
Russell Springs	Logan	.....	2	50.6	.....	84	5	20	18	55	0.27	.....	0.10	0	5	13	9	8	se.	D. J. Hutto.
St. Francis	Cheyenne	3,288	4	49.2	.....	82	5	23	16	46	4.18	.....	2.20	0	5	8	17	5	s.	J. E. Uplinger.
Salina	Saline	1,227	28	55.9	+ 0.9	84	12	31	3†	42	0.90	− 1.78	0.38	0	6	9[f]	13[f]	2[f]	s.	Prof. A. W. Jones.
Scott	Scott	2,971	6	52.0	.....	86	5	23	18†	48	1.26	.....	0.86	T.	3	15	8	7	n.	J. B. Loughran.
Smith Center	Smith	1,800	2	53.8	.....	87	5†	26	7†	51	1.30	.....	1.02	0	5	5[a]	16[a]	8[a]	se.	W. H. Nelson.
Topeka	Shawnee	997	26	55.1	+ 1.4	80	5	34	7	36	1.11	− 1.61	0.61	0	8	12	12	6	s.	U. S. Weather Bureau.
Valley Falls	Jefferson	913	13	54.4	+ 1.1	81	12	29	7	40	2.29	+ 0.04	1.05	0.3	8	13	6	11	s.	Miss Nettie Maxwell.
Vinland	Douglas	880	3	.....	.....	.....	.....	.....	.....	.....	2.21	.....	0.90	0	6	....	.....	.....	.....	A. Schick.
Wakeeney	Trego	2,456	29	52.2	− 1.2	84	5	20	18	41	1.65	− 0.43	1.00	0	4	20	4	6	s.	A. S. Peacock.
Wallace	Wallace	3,303	42	49.4	− 1.2	80	4†	20	7	48	0.42	− 1.40	0.26	T.	4	3	22	5	.....	M. T. Griggs.
Wamego	Pottawatomie	1,002	19	.....	.....	.....	.....	.....	.....	.....	1.71	− 1.40	0.90	0	5	13	10	7	sw.	M. L. Stone.
Missouri.																				
Amoret	Bates	850	*4	5.3	.....	76	12†	34	8	37	6.03	.....	1.95	0	9	9	8	12	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	23	56.2	+ 0.1	78	4†	32	2	40	6.06	+ 1.74	1.99	0	9	4	19	7	ne.	T. C. Brown.
Arlington	Phelps	695	23	.....	.....	.....	.....	.....	.....	.....	4.52	+ 0.78	1.80	T.	9	11	3	16	s.	G. V. Randolph.
Arthur	Vernon	767	20	56.4	+ 1.5	76	11	33	8	36	6.77	+ 2.73	2.10	0	11	14	10	6	se.	J. T. Armstrong.
Avalon	Livingston	.....	27	53.8	+ 1.1	76	24	32	3†	32	2.09	− 1.85	0.60	0	5	20	2	8	sw.	F. G. Ashbaugh.
Bagnell	Miller	594	17	.....	.....	.....	.....	.....	.....	.....	7.64	+ 4.03	2.20	0	11	12	5	13	w.	W. S. Brockmann.
Bethany	Harrison	881	23	53.2	+ 2.4	75	5†	32	2†	34	1.29	− 1.76	0.40	0	5	13	12	5	sw.	W. H. Skinner.
Bolivar	Polk	1,070	25	57.5	+ 1.7	82	13	32	2†	39	8.79	+ 4.95	4.04	0	13	15	8	7	sw.	A. C. Fink.
Boonville	Cooper	600	37	.....	.....	.....	.....	.....	.....	.....	3.78	− 0.22	0.94	0	10	15	1	14	se.	C. Randecker.
Brunswick	Chariton	652	33	54.0	− 0.3	76	5†	34	18	33	4.42	+ 1.22	1.88	0	11	12	3	15	nw.	Louis Benecke.
Clinton	Henry	800	25	58.6	.....	84	13	34	18	34	4.60	+ 0.39	1.70	0	7	16	9	5	sw.	A. E. Derwent, M. D.
Columbia	Boone	784	23	55.4	+ 1.1	80	5	34	17	31	5.34	+ 1.64	2.35	0.1	16	9	8	13	s.	U. S. Weather Bureau.
Conception	Nodaway	982	29	52.6	+ 0.6	77	5	30	7	33	2.72	− 0.09	1.15	0	6	5	18	7	sw.	Fr. Adhelm Hess.
Crocker	Pulaski	1,124	1	56.2	.....	84	5†	24	8	48	7.71	.....	2.22	0	12	9	11	10	se.	Ira H. Stephens.
Eldon	Miller	.....	1	58.0	.....	82	5†	34	18	38	6.80	.....	2.50	0	11	17	7	6	nw.	G. M. Tinsley, M. D.
Eldorado Springs	Cedar	750	7	56.2	.....	80	13	31	2†	42	6.69	.....	2.05	T.	9	15	6	9	sw.	Samuel Graham.
Fayette	Howard	725	30	54.0	− 1.1	77	5	32	17†	29	3.18	− 0.22	0.79	T.	10	16	8	6	.....	Prof. T. Berry Smith.
Fulton	Callaway	818	22	56.2	+ 2.6	80	5	32	8†	41	6.75	+ 2.57	2.33	0	13	14[b]	8[b]	6[b]	.....	Russel Johnston.
Glasgow	Howard	618	34	.....	.....	.....	.....	.....	.....	.....	2.78	− 0.33	0.68	0	11	15	2	13	e.	J. J. Shaughnessy.
Grant City	Worth	1,130	20	53.2	+ 1.8	77	5	31	3	35	3.23	+ 0.29	1.00	0	7	17	4	9	s.	W. H. Campbell.
Harrisonville	Cass	912	40	55.8	+ 1.8	79	24	35	7†	39	4.60	+ 1.06	1.38	0	12	9	3	18	sw.	A. J. Sharp.
Hazelhurst	Livingston	.....	20	.....	.....	.....	.....	.....	.....	.....	1.87	− 1.18	0.62	0	5	....	.....	.....	.....	W. H. Baker.
Hermann	Gasconade	482	38	.....	.....	.....	.....	.....	.....	.....	9.01	+ 5.40	2.86	0	16	10	5	15	s.	C. T. Maushund.
Houston	Texas	1,280	20	55.5	− 0.2	80	26	28	8	40	7.13	+ 2.49	1.08	T.	13	5	16	9	s.	E. Dempsey.
Jefferson City	Cole	628	30	54.8	− 2.4	82	5	32	8†	38	6.86	+ 3.42	2.05	0	14	16	0	14	s.	Miss Emma Swift.
Kansas City	Jackson	963	23	55.4	+ 1.1	78	12	35	17	33	1.53	− 1.76	0.63	0	7	10	12	8	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	21	53.4	+ 0.9	77	13	32	3†	33	2.12	− 1.01	0.56	T.	8	14	9	7	sw.	J. F. Sharp.
Lamonte	Pettis	863	24	55.2	.....	81	13	33	18	36	4.36	+ 0.73	1.30	0	10	10	12	8	sw.	J. Ed. Hall.
Lebanon	Laclede	1,265	24	57.2	+ 0.9	81	5	32	2	36	6.63	+ 2.02	2.30	T.	9	8	12	10	sw.	M. W. Serl.
Lexington	Lafayette	813	31	55.4	+ 1.2	80	13	30	7	34	3.02	− 0.23	0.81	0	11	14	0	16	s.	J. W. Keithley.
Liberty	Clay	864	24	56.0	+ 1.0	81	12	34	7	36	1.31	− 1.87	0.57	0	4	8	14	8	nw.	W. C. Willmott.
Lockwood	Dade	1,088	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. S. Crow.
Marshall	Saline	779	22	53.6	− 0.5	76	13	33	16†	32	4.01	+ 0.26	0.86	0	12	19[b]	3[b]	6[b]	sw.	Prof. W. H. Black.
Maryville	Nodaway	1,160	22	53.0	+ 2.4	80	5	30	7	36	2.87	− 0.31	1.18	0	9	12	3	15	s.	J. R. Brink.
Mount Vernon	Lawrence	1,480	32	56.5	+ 0.9	80	11†	33	2†	38	8.03	+ 4.57	4.00	T.	11	11	10	9	sw.	J. R. White & Son.
Nevada	Vernon	860	19	.....	.....	.....	.....	.....	.....	.....	7.89	+ 4.25	3.55	T.	10	21	4	5	sw.	C. Jewell.
Oregon	Holt	1,113	57	53.3	+ 0.8	80	5	31	7	38	1.18	− 2.20	0.75	1.8	5	6	17	7	s.	Tom Curry.
Pattonsburg	Davies	.....	3	.....	.....	.....	.....	.....	.....	.....	1.69	.....	0.60	0	5	14	1	15	sw.	Wm. Burton.
Rolla	Phelps	1,139	32	57.4	+ 2.9	79	11	32	2	38	6.96	+ 2.59	2.12	2.0	13	15	4	11	sw.	Prof. P. J. Wilkins.
St. Charles	St. Charles	614	35	57.4	+ 2.0	79	5†	32	3	32	6.55	+ 3.15	1.32	0	12	12	11	7	s.	L. C. Saeger.
St. Joseph	Buchanan	967	41	54.2	.....	79	12	33	17	34	1.84	− 1.29	0.93	T.	6	9	13	8	se.	U. S. Weather Bureau.
St. Louis (1)	St. Louis City	567	41	57.2	+ 1.1	80	14	34	2	26	7.84	+ 4.32	2.76	T.	14	10	11	9	s.	Do.
St. Louis (2)	....do....	578	1	58.0	.....	81	14	34	2	27	7.66	.....	2.49	T.	14	14	6	10	se.	St. Louis University.
Sublett	Adair	1,000	33	52.0	+ 0.5	76	25	26	22	35	4.70	+ 1.16	2.00	5.0	6	9	7	14	se.	Lewis Spriggs.
Trenton	Grundy	812	18	53.4	+ 0.8	74	24	33	3†	29	1.63	− 1.34	0.26	T.	9	14	4	12	s.	W. H. Estes.
Unionville	Putnam	1,072	20	50.8	− 0.1	72	5†	28	3	36	3.03	− 0.66	0.66	0.3	10	14	3	13	s.	Geo. W. Davis.
Warrensburg	Johnson	883	34	56.9	+ 0.9	78	13	35	7†	33	4.47	+ 1.52	1.29	0	11	17	8	5	s.	A. F. Smithson.
Warrenton	Warren	865	23	55.5	+ 3.3	81	5†	32	18	39	11.71	+ 7.82	2.47	0	15	9	5	16	s.	Prof. J. H. Frick.
Warsaw	Benton	700	9	58.0	.....	84	5	31	8	42	7.09	.....	2.78	0	11	14	11	5	nw.	J. R. Smith, M. D.
Wheatland	Hickory	920	20	.....	.....	.....	.....	.....	.....	.....	7.70	+ 3.01	2.70	0.3	6	20	7	3	s.	Mrs. S. A. Jackson.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.
‡ All temperature normals for Montana used in this table have been reduced to the 33-year period.

TABLE 2.—*Daily precipitation for April, 1912. District No. 6, Missouri Valley.*

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Wyoming.																																
Arapahoe	Bighorn												.10							.11	.10					.17						0.48
Barnum	Powder					.10							T.	T.						T.	1.00						T.					1.10
Basin	Bighorn																															
Bennett	North Platte					.07								.07							.11									.12		0.37
Big Creek Station	do					T.	.20						T.	T.	.05			T.	T.		.34	.20						.45			.09	1.33
Burns	South Platte												.11	.10				.09		.38	.19											0.87
Casper	North Platte						.08								.68		.10	.25		.45		.85										2.41
Centennial	do					.01	.05				.01		.04	.24	.14	.15	.12	T.	.12	.30	.80	.10	.02			.05	.25	.01			.03	2.44
Cheyenne	South Platte						.01				T.		.03	.02			T.	T.	.14	T.	1.28	.12	T.				.02	T.				1.62
Chugwater	North Platte													.10	T.						.60	.40				T.						1.10
Clark	Yellowstone					.10					T.	.05	.15	.01	T.		.05	.08		.18	.36					T.	T.				T.	0.98
Cody	Bighorn										.10		.21				.04				.45											0.80
Crazy Creek	Yellowstone					.10					.04		.17	.02				.02		.05	.25									.07	.22	0.94
Dome Lake	Tongue					.40						.10	.40	.60	1.80		.80	.20	.20	.20	1.50		.30			.30				.10	.20	7.10
Douglas	North Platte						.08							1.25	1.15	T.					.25	.26				.28						3.27
Dubois	Bighorn					T.							.40			.10		.10	.55	.90	.30	.60				.20				.15		3.20
Eatons Ranch	Tongue					.10							.43				.18	.12		.82	.10			.80						.05		2.60
Echeta	Powder					T.	T.				.31		.10	.65	.40			.40			.45			T.	T.							2.31
Elk Mountain	North Platte						*	.27					.04	*	.96					*	*	1.08				*	.24				.21	2.80
Encampment	do					T.	.06				T.		.04	T.		.04	T.	.02	T.	.02	.08	.13		T.		.09	.05			T.	.16	0.69
Ervay	Powder				T.		.08									.28		.20		.16		1.12				.26						2.10
Fort Laramie	North Platte											T.		.45	1.32	.03					.90	.29						.02				3.01
Foxpark	do										.10					1.70														.10	1.90
Germania	Bighorn																															
Gillette	Powder											.03	.80	.60				T.	T.		.14	.04										1.61
Horse Creek	Bighorn					T.					T.		.47	.04				.12		.55	T.	.12	.03			T.	.45				T.	.04	1.82
Hunters Station	Powder												.22	.12	T.		.12	.28	.26	.26	1.05	.52				.12	T.			T.	.12	3.07
Hyattville	Bighorn													.30				.50			.25											1.05
Jireh	Niobrara										.05		.23	1.50	.50					.49	.90	.14				.02				T.		3.83
Kirtley	do																															
Kirwin	Bighorn																															
Knowles	Cheyenne					T.	.01							1.85	.69	.06				.03		.16				.12						2.92
Lagrange	North Platte										.11		.08	.40	.35		.02	.01			.79	.24				.02						2.02
Lander	Bighorn												.06					T.	.02	.03	.50	.40			T.	.63				T.	T.	1.64
Laramie	North Platte					.01					T.		.32		T.	T.	T.	.01	T.	.12	.53	.45	.02			.02	.03	T.			.02		1.53
Leo	do																															
Lolabama Ranch	Yellowstone												.05							.06	1.08											1.19
Lovell	Bighorn												.05				T.	T.	.14		.44									T.		0.63
Lusk	Niobrara												.12	.60	.30						.80											1.82
Manville	do						T.				.06			4.00	*						1.90	*			.03				.02		6.01
Moorcroft	Cheyenne					T.					.01					1.75		.01	.05						.06						1.88
Moore	North Platte													.11	.01			.01	.02	.03	.60	.40				T.	.04	T.			T.	1.22
Newcastle	Cheyenne					T.	T.				T.	.16	T.	.51	.10			.10				T.								T.		0.87
Pathfinder	North Platte						.02								.07		.01	.02		.03	.11	.11				T.	.15	T.			.04	0.56
Pinebluff	South Platte													.24	.16			.12	.17	.22	1.48	1.24						T.	T.			3.63
Pine Ridge	Cheyenne					T.							T.	.50	.61						.08						.18					1.37
Powell	Bighorn												.31					.05		.08	.28	.01			.02		.01		.03		0.79
Rawlins	North Platte					.16	T.				T.		.02	.11	.10		T.		T.	.04	.40	.12	.02			.04	.76	.07			T.	1.84
Riverton	Bighorn												T.		.01					.09	.27	.15	.03			T.	T.					0.55
Rockypoint	Powder					.02						.16	.13	.40	.30			.05	.06		.30			T.		.22	.08					1.72
Saratoga	North Platte					.08	T.						T.	T.	T.				T.	T.	.19	.04	.01	T.		T.	.10				.02	0.44
Seven Mile Creek	do													.02	T.	.50	.20	.30	.13	.30	.22	.20				.05	.25	.07			.25	2.48
Sheridan	Tongue					.16					.06		.38	.07	.04		T.	.02		.13	.35					.01	T.	T.			.01	1.23
Shoshone Dam	Bighorn					T.					T.		T.				T.	T.		.25	.35					T.				.05	T.	0.65
Soldiers Home	Powder																															
South Pass City	North Platte			T.		.04	T.				.01		.14		T.	T.		T.	T.	.22	.20	.32			T.	.06	.07			T.	.10	1.16
Sundance	Cheyenne													.57	.10				.30		.25					.10						1.32
Thermopolis	Bighorn						.06						.12	.02	.26					.02	.23	T.				T.						0.71
Ulm	Tongue						.21						*	*	1.46						.45					.17					.02	2.31
Verona	do					.05							.34	.42	.43					.21								.18				1.63
Wheatland	North Platte						T.					T.		.25	.43	.01			T.		.32	1.60	T.				T.					2.61
Wiants Ranch	do					.16									.09			.08	.04		.14	.12	.04		.05	.08	T.	T.				0.80
Wiley	Bighorn																															
Woodrock	Tongue				T.	.20	.26					.26	.80	.76	1.32		.39	.65	.08	.19	2.02	.40	.46		T.	.52	.07	.18		.19	.10	8.85
Worland	Bighorn												.01	T.			.02	.05		.03	.03									T.	T.	0.14
Wyncote	North Platte										.03		.07	.90	.30				.03		.88	.06				T.		.03				2.30
Yellowstone Park	Yellowstone				.03	.39					T.	.02	.41	.12				.06	T.	.26	.12	.03	T.	.05	.19	.12	.08		T.	.28	.08	2.24
Fairview Dome	do																															
Fountain	Madison					.20							.20	.10		.20		.10	.20	.06		.80			.20	.20	.40	.30	.40	.10	.20	3.66
Gallatin	Gallatin				.24								.40	.10						.50	.20					.28	.15		.06	.80	.45	3.18
Grand Canyon	Yellowstone					.30					T.	T.	.40	.40	.15	T.	T.	T.	T.	.20	T.	T.	.10		T.	.30	T.			T.	.10	1.95
Lake Yellowstone	do				.10	.10					.05		.30					.20		.30	.20	.15				.20				.20	.30	2.10
Norris	Madison				T.	.12					.03		.26	.15	T.			.06	.05	.29	.07	T.			T.	T.				.02		1.05
Riverside	do				.20	.20							.10						.20	.60	.30	T.	.05		.09	.30	.20		.09	.10	.30	2.73
Sylvan Pass	Bighorn										.10		.12		.31			.19		.39			T.		.22	.18					.49	1.98
Thumb	Yellowstone					.40							.20				.10	.20	.20	.50											.30	1.90
Tower Falls	do					.20							.30	.40					.10		.50											1.50
U. Geyser Basin	Madison				.03	.05							.10	.10						.25		.05			.10	.60				.20		1.48
Montana.																																
Adel	Missouri					.03							.04	.40	.20		.06		.13						.15	.21				.12		1.34
Agricultural College	Gallatin				T.	.31								.53	.24		.13	.17		.22	.71	.04				1.12		.12		T.	T.	3.59
Augusta	Missouri																.23	.26	.48	.18												1.15
Babb	St. Marys					.12						.15	.08	.03			.02	.02	.15	.05												0.62
Badger Creek	Marias	.01										.04	.04	.10	.02		.04	.09	.19											.03		0.56
Bald Butte	Missouri					.03						.02	.14	.48	.13		.09	T.	.13	.43					.13	.02				.18	.01	1.79
Bigtimber	Yellowstone												.98					.30								.10						1.38
Bigtimber Creek	do					.12							.62		.09			.53								.12				.11	.15	1.74
Billings	do					.14							.70	.03	.11			.23		.08	.30					.21	.06			.04	.02	1.92
Blackleaf	Missouri					.02							.22	.27			T.	.35	.63	.15												1.64
Bloomfield	Yellowstone																															
Boulder Nursery	Jefferson			T.		T.							.60	.90	T.		.03	T.	.12	.09	T.					.40		T.		.20		2.34
Bowen	do					T.							T.	.01						.02					24						.09	0.36
Bridger	Yellowstone					.01							.11	.01				.04			.16						.02					0.35
Broadview	do												.99	.05	.45		.15									.28	.08			.03		2.03
Busby	do					.15	.01					.17	.58	.20	.15						.32					.27	.05			.01		1.91
Busteed	do					.05							.30	.04	.06		.03	.11			.05		T.			.33				T.		0.97
Cabin Creek	Jefferson				T.								.34	.06						.30	.12							.04		.07		0.93
Canyon Ferry	Missouri					.06								.11					.03	.26					.02	.69				.07		1.24
Cascade	do					T.							.05	.63	.12		.12	.12	T.	.02			.04		.07	.03				.11	T.	1.31

TABLE 2.—*Daily precipitation for April, 1912. District No. 6*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Montana—Contd.																																
Chessman Reservoir	Missouri					.08							.50	.70	.20		.05	.03	.26	.15					.30	.25		T.		.31		2.83
Chester	Marias												.13	.50			.05	.32									.16				1.16
Chinook	Milk					T.						.55		1.06	.35			T.								.27		.02		T.		2.25
Clearcreek	do													.68	.41											.45						1.54
Clemons	Missouri					T.							.09	.21		.07	.50		.42	.66	T.				T.	.03				.07	T.	2.05
Clydepark	Yellowstone				T.	.27						.17	.05	.90	.15		.31	.04			.15				.29	T.		.02			T.	2.35
Conrad ||	Marias												.13	.15		.17	.21		.04						.05							0.75
Copper	Missouri				.06	.07							T.	.01			.12	.32							.07		T.			.30	T.	0.95
Crow Agency	Bighorn											.09	.51	.24	.64			.55			.06					.29						2.28
Culbertson	Missouri					T.							.22	.88	.40					.08				T.		T.						1.58
Cummings	Bighorn																															
Cut Bank	Marias					T.								T.				T.	.15											.17		0.32
Denton	Missouri				.02	T.				T.	T.	T.	T.	.80	T.		T.	.03	T.	T.				.02	.01	.12	T.			.07		1.07
Dillon	Jefferson					T.							.05	.51	.04	.30	.02		.15	.35	.92		T.		.02	.04	.02					2.42
Dirty Creek	Missouri				.18	.10	.02					.06	.02	.09	.04		.02	.08	.01	.01			.02			.07	T.				.25	T.	0.97
Dry Creek	do				T.	.44					.09		.17	.32				.18	.09						.15					.04		1.48
Dry Wolf Camp	do				T.	.04					T.	.01	.15	.04	T.	T.	.16	T.	.04	.15			T.		.22	.19	.07			.15		1.22
East Gallatin River	Gallatin					.28							.30	.23	.14					.42	.48				.05	.60			.11	.09	.07	.06	2.83
Ekalaka	Lt. Missouri					.03	.07					.17	.05	.09	.21	.40															.05	1.07
Elkhorn	Jefferson			T.		.30					.20		.14	.30	.40	T.	.30	.17	.18	.50		T.	.11		.52	.17		T.		.22	T.	3.51
Fallon	Yellowstone					.10						.25			.95											T.						1.30
Fish Creek	Jefferson				T.	.02					T.			.68	.12		.11	.18	.07	.26	.29		.20		.45	.21				.15		2.74
Flathead Creek	Yellowstone				T.	.55					T.		T.	.26			T.	T.								.34		.01		T.	.38	1.54
Forsyth	do																															
Fort Benton	Missouri											.30			.50	.60	.25															1.65
Fort Shaw ||	do													.10	.11		T.	T.			T.								10			0.31
Foster	Bighorn					.17						T.	.46	.06	.33			.69			.01				.40		.10		.03	.03		2.28
Garneill	Missouri																															
Glasgow	Milk											T.		.90	T.											T.						0.90
Glendive	Yellowstone				T.	.05						.35	.10	.75	.65					.05						.25					T.	2.20
Goldbutte	Marias											.10		.03			.11	T.												.06		0.30
Graham	Powder					.14						.45	.10	.82	.28	T.		.11	.02		.08					.03						2.03
Grayling	Madison				.05	.05					T.		.41						T.	.21	.23				.07	.13			T.	.42	.05	1.62
Great Falls	Missouri					T.				T.		.01		.38	.12		.06	.11		T.				T.	.09	T.				.11		0.88
Halfway House	do				.09	T.								.17	.22				.19	T.			.08							T.		0.75
Harlowton	do													*	.16				.20												*	0.36
Havre	Milk					T.						.27	.07	.89											.10		T.	T.		.03		1.36
Helena	Missouri				T.	.01					T.		.02	.23	.11	T.	.08	.14	.12						.18	.27		T.		.05	T.	1.21
Highwood	do					.06						T.	T.	.90	.40			.12	T.	T.	T.		.05		.12					.10		1.75
Huntley	Yellowstone					.22							.95	.15	.22			.39			.13					.09						2.15
Jones Canyon	Gallatin	.35									.20		.95	.61		.60	.15		.33	.35		.07	.15		1.10	.41				.16	.15	5.58
Jordan	Missouri																															
Knobles Ranch	Milk					T.						.15	T.	.27	.04			.12	.04						T.			.12		.05		0.79
Lewistown	Missouri				.19	.09						.05	.10	.21	.75											.84						2.23
Lonetree	do											.05	.05	.85	.35			.75								.21				.20		2.46
Lytle	do					T.						.07		.75	.09		T.	.18	T.	.01					.05	T.				.20		1.35
Malta	Milk				T.	.02						.32	T.	.80	.13											.04	.01			T.	T.	1.32
Medicine Lake	Missouri													.50	1.00				.06					.06	.05							1.67
Melstone	do					.05						.46	*	.78		.44										.32				.08		2.13
Mildred	Yellowstone					.42	.01					.62	.12	.64	2.04			.01								.08				T.	T.	3.94
Miles City	do					.20						.07	.40	.81	.93											.01			T.	.05	.01	2.48
Norris	Madison					.32							.14	.20					.15		.47			.15		.19	.07	.01			.01	1.71
Nye	Yellowstone					.18	.03						.94	.16			.05	.25	T.	.05	4.15						T.			.07		5.88
Olsen Creek	Jefferson													.19	.04						.02	.01	.09	.08	.13							0.56
Pinegrove	Missouri					.07						.02	T.	.20			.06									.50	.20					1.05
Pipestone Pass	Jefferson					.02							.25	.45	.05	T.	.30		.15	.19	.10		.14		.39	.02	T.	T.		.15	.01	2.22
Plevna	Yellowstone					.19	.02	T.				.60	.09	.95	.41			T.	T.	.03	.03					.02				T.	T.	2.34
Poplar	Missouri					T.						T.	T.	.07	.27											T.						0.34
Red Lodge	Yellowstone					.15							.40	.14	.07		.11	.30			.15	1.69				.09	T.					3.10
Renova	Jefferson				T.								.18	.16	.05		T.	.06		.07	.04		T.		T.	.21	.16			.18	T.	1.11
Ryegate	Missouri					.08							.50				.18	.24							.08				T.		T.	1.08
Savage	Yellowstone					.14						.21	.03	1.22	.55											.24						2.39
Seville	Marias					.01					.03			.02					.09		.02									.03		0.20
Shelby	do													.16	.06		.09		.07											.13		0.51
Sidney	Yellowstone				T.	.25						.25	T.	1.75	1.35				T.				T.		.09		T.				T.	3.69
Spokane Ranch ||	Missouri					T.							T.	.08	.06	T.	.03		.06	.06					T.	.48				.06		0.83
Springbrook	Yellowstone					.20	T.					.20	.18	.45	.95								T.			.14		T.				2.12
Stearns	Missouri					T.								.15	.69			.57	.32	.58	.05			T.	.17					.37		2.90
Sunlit Farm	Milk					T.						.19	.11	.30	T.					T.		.02			.30				.30	T.		1.22
Sun River Canyon	Missouri				T.	T.						.10	.02	.18	.03			.38	.29	.08	.55	.13				.01	T.				.04	T.	1.81
Three Forks	Madison																															
Trail Creek	Yellowstone					.22						.03			.18	.10			.23	.14	.38					.77	.05	.06				.05	2.21
Twin Bridges	Jefferson																															
Utica	Missouri				T.	.03							.02		.38						.50	.05				T.	.26				.03		1.27
Valentine	do												.28														.33						0.61
Valier	Marias					T.					T.			T.	.04	.05			T.	.16	T.	T.		T.		T.	.02			.02		0.29
Virginia City	Jefferson				.04									.02	.04	.12			.16	.02	.16	.96					.04						1.56
Wall Rock Mount'n	Missouri				.20												.15	.05	.06	.25	.10		.04	.27	.04	.05	.26	.06	T.		.10	.05	1.68
Warm Springs Creek	Madison				.04	.09							.16	.17	.03			.04	.08	.02	.64	.30			.05	T.	.29	.07	.01		.05	.02	2.06
Wheaton	Missouri									T.		T.	.01	.01				.19								.15	T.					0.36
White Sulphur Sp'gs	do					.09	.07							.19				.20	.01						.11	.39				.05		1.11
Wilder	do																															
Wolf Creek	do												.05	.32	.11		.16	.12	.09	.21					.11	.39				.19	T.	1.75
Woodville	Jefferson					T.					T.		.08	.15	.04		.02	.09	.04	.02	T.	.01	.23	.21	.17	.04	T.			.07	.01	1.18
North Dakota.																																
Aplin	Knife					.11	.01					.40	.08	.40	.13	.20				.02	.29		.02	.12				T.			.05	1.83
Arnegard	Missouri																															
Ashley	do											T.	.12	.56	T.	T.											1.77	.30	.05		.31	3.11
Beach	Little Missouri					.20	.02					.27	.13	1.11	.42						.28	.02					.04		T.		.04	.18	2.71
Belfield	Heart						.07					.66	.25	1.47	.60	.05						.26	.02			T.	.07					.18	3.63
Berthold Agency	Missouri					.11	T.					.33	.08	.75	.35						.10			T.				T.		.12		1.84
Bismarck	do					.03	T.					1.31	.08	.48	.02									T.	T.	T.	.10		.02		.05	.21	2.30
Bowman	Grand																															
Broncho	Knife											.45	.40	1.15	T.			T.								T.						2.00
Buford	Missouri																															
Carson	Heart											.31	.25	.72	.04																	1.32
Dickinson	do					.08						.52	.42	.76	.41	.02				.18	.03					T.		T.		T.		2.42
Edgeley	James													2.00													.57	.09			.16	2.82
Energy	Missouri											.40		.30	.10	T.					.10		T.			T.		T.		.20	T.	1.10
Epping	do					.20						.10		.65	.26						.18				.03	.02						1.44

TABLE 2.—*Daily precipitation for April, 1912. District No. 6*—Continued.

Stations.	Watershed.	Day of month.																										Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
North Dakota—Con.																																
Fullerton	James											.03		2.45	T.						T.						.41	.09			.17	3.15
Garrison	Missouri										T.	.63		.32	T.		.50				.16										.28	1.89
Grinnell	....do																															
Hettinger	Grand					T.	T.					.25	.35	.40	.02													.15				1.17
Howard (near)	Missouri					.22	T.	T.				T.	*	*	1.80				T.	T.		T.			T.	T.			T.			2.02
Jamestown	James						.20							1.25	.75												.42		.12			2.74
Lamoine	Missouri					T.	.12					T.	T.	*	1.22	.20										.56			.06		.15	2.31
McHenry (near)	James					.25	.08					.20	.10	.97							.30						.17	.23	.10		.41	2.81
Marmarth (near)	Little Missouri					.10	.03					.38	.20	.80	.42				T.	T.	T.	T.				.02		T.		T.	T.	1.95
Marstonmoor	James						.35					T.		.72	.07	T.					T.				T.	T.	2.30	T.	T.		.48	3.92
Medora	Little Missouri					T.						.14				1.38										.16					T.	1.68
Melville	James											T.		.90	.07	T.											1.57	T.			.66	3.20
Mott	Cannon Ball					.26	.03					.76	.82	.23	.05						.12					.02		T.		.02	.05	2.36
Napoleon	Missouri						.17						.03	.53	.15												.66		.01		.02	1.63
New England	Cannon Ball																															
New Rockford	James					.42	.14					.14	.49	.92							.31					1.07		.39			.76	4.79
New Salem	Heart					.05	.05					.42	.12	.72	.09	.05								T.	T.		T.	.02			.22	1.74
Orange	Cannon Ball																															
Reeder	Grand					T.	T.						.10	1.35	.75		T.			T.	.15							T.		.02	T.	2.37
Steele	Missouri					.35						T.		.64	.30	T.						T.				.56		.04		.09	.70	2.68
Washburn	....do											.23	T.	.40		T.					T.		T.								.32	0.95
Williston	....do					.16	T.					.03	.21	.89	.47				T.	.03	.03					.02		T.		.02		1.86
South Dakota.																																
Aberdeen ‖	James													3.65	.25	.90											1.75		.25		.05	6.85
Academy	Missouri						.12						.35	.74	.23	.30					.24	1.51				T.	.49	.13	.06			4.17
Alexandria	James													1.50	.22							1.83				.73						4.28
Ardmore	Cheyenne													.10			.05			1.00	1.00											2.15
Armour	Missouri																															
Bellefourche	Cheyenne													1.20	.50			.05	.16							.14						2.05
Brookings	Big Sioux					.08								.80	.15	.19						.45		.07		.18	1.35		.09			3.36
Bryant	....do						.15							3.40	.12	.23						.06				.10	.48	T.	.08		.02	4.64
Camp Crook	L'le Missouri					T.	.03					.23	.07	.58	.64			T.	.02								.01		T.	.01		1.59
Canton	Big Sioux																															
Cascade Springs	Cheyenne										.28		T.	.38	T.			.04			1.68	.45										2.83
Castlewood	Big Sioux				T.		.06	T.				T.		2.48	.07	.17	T.	T.	T.	T.		.15	T.			.12	1.28	.02	.08	T.	.03	4.46
Centerville	Missouri	T.												.47	.12	.08					T.	1.19		T.		T.	.47	T.	.06			2.39
Chamberlain	....do																															
Clark	James						.16							2.78	.02	.07	T.					.12	T.			.40	.53	.04	.08	T.	.06	4.26
Cottonwood	Missouri						T.				.20		.10	.80	1.40	.02					.20	.12				.07	.40	.01				3.32
Custer	Cheyenne													1.30					*	.43												1.73
Daviston	Owl					T.	T.					.03	.30	.37	.16	.01			.02	T.	T.	T.				T.		T.		T.	.17	1.06
Deadwood	Cheyenne					.40	.25					.25	T.	1.00	1.10			T.	.25		.60	.50				.25				T.		4.60
Deerfield	....do					.10	.04					.08	.03	.82	.02			.08	.05	T.	.32	.20				.03		.02		.03	.02	1.84
De Smet	James					.12							*	4.00	.20	.20						.30				1.25		T.				6.07
Dowling	Cheyenne						T.					.30	T.	.55	.60	.05					.10	.05				T.		T.				1.65
Dumont	....do					.17	.25					.09	.02	1.52	.46				.89	.05	.11	.83	.31			.13		.21				5.04
Eagle Butte	Grand						T.					.12	.17	.45	.24	T.						.22		T.		T.		.04			T.	1.24
Eales	Missouri						T.					.08	*	.80	.05	T.					T.	T.				T.	.08	.51			T.	1.52
Edson	Cheyenne					.17	T.					.23	.45	.30	.41						T.						T.		T.	T.	1.56
Elk Mountain	....do					.05					.20		.20	.83				.15										.10				1.53
Ellingson	Grand					T.	T.					.15	.43	.44	.15	.06			T.	T.	T.									T.	.15	1.38
Englewood	Cheyenne						.01					.02		.60	.70				T.		.40	.55										2.28
Eureka	Missouri						T.					T.	.05	.60	.02												.30	.22	.02		.08	1.29
Fairfax	....do						.10							.57	.26						.18	1.08					.15		.25			2.59
Faulkton	James											T.		1.45	.60	.05											.40	.18			.06	2.74
Flandreau	Big Sioux													.95	.14	.28						.82				.35	1.25		.06			3.85
Forestburg	James						.16						.27	2.17	1.06	T.						.63				.11	.48	.07				4.95
Fort Meade	Cheyenne						T.						T.	.40	1.00	.80						.50				.20						2.90
Frederick	James													2.03	.37											1.50		.20				4.10
Gannvalley	Missouri																															
Greenmont	Cheyenne					.30	.10				.10		.10	3.00							.60											4.20
Greenwood	Missouri						.02							1.60	.31	.32					.60	.03				.20		.27				3.35
Hardingrove	Cheyenne											.30	.33	.65	.30						.36	.03						.11				2.08
Hardy Ranger Sta	....do																															
Harveys Ranch	....do					.45							1.90	2.40			2.00									.33						7.26
Hermosa	....do										.06		.10	.51			.02				.81							.05				1.55
Highmore	Missouri												.11	.30	.20	.09										.05	.07	.23				1.05
Hopewell	Cheyenne						T.					.61	T.	.13	.40						.10			T.		T.		.57				1.81
Howard	Missouri						.07							2.52	.10	.20						.95		T.		.21	1.05	T.	.11			5.21
Howell	James				T.		T.						.74	1.22	.24	.01				T.	T.	T.				.01	.27	.30				2.97
Huron	....do	.01				.10	.10						.76	.88	.30	.01						.31				.93	.28	.05			.03	3.76
Ipswich	....do												T.	1.15	.32											.20		.27				1.94
Kadoka	White											.30	.08	.40	.88						.45						T.	.75				2.86
Kennebec	Missouri	.05											.10	.09	.20	.08						.08						.40				1.00
Kidder	James											T.	T.	2.50	0.76	T.										.03		.01		T.		3.30
Kimball	Missouri					T.	.19						.17	.35	.20	.13					T.	.73					.19	.13			T.	2.09
La Delle	James						.27	T.						2.65	.20	.25					T.	.30	T.			.76	.42	.22	.11		.10	5.28
Lead	Cheyenne						.16					.04		1.56	1.04			.07		.02	.27	.48				.05	.53					4.22
Lemmon	Grand																															
Manderson	White											.21		1.19	.24	.01					.67	.39					.01	.65				3.37
Marion	Missouri						.07							.86	.20	.20						1.39				1.1	1.00		.05			3.88
Marston	....do												.80	.25	.24	.01												.55				1.85
Mellette	James						T.						T.	2.85	.43								T.			.34	.31	.15			.12	4.20
Menno	....do						T.				T.		.95	T.	.20							1.75				T.	.50	T.				3.40
Milbank ‖	Minnesota						.53							.36	1.15	.40						.16	.14			1.58		.08				4.40
Mitchell ‖	James						T.							1.55	.21	.05						1.35	.10			.60		.10				3.96
Mobridge	Missouri											.22	.40	.20	1.20				.16								.27	.20		T.	T.	2.65
Murdo	White														3.00							.05						.50				3.55
Osirichs	Cheyenne											.06		.80	.08							2.75				.31		.20				4.26
Onaka	James					T.					T.		.43	.67	.47	.20			T.							.53		.68		.06	.07	3.11
Orman	Cheyenne					T.							T.	1.55	.31	T.		.10	.08		T.					.14						2.18
Ottumwa	Missouri						T.					.21	T.	1.10	.70						.15							.56				2.72
Parkston	James	.04		.02									2.27	.58	.32							1.50				.42		.17				5.32
Pierre	Missouri					T.						.07	.18	.07	.11						T.			T.		.02		.44			T.	0.89
Plankinton	James		T.				.12						.50	2.05	.10	.10						1.31				.37		.16			T.	4.71
Pollock ‖	Missouri							.20				.05		.40	.04	T.											.55		.08		T.	1.32
Rapid City	Cheyenne					T.	T.				.04		.01	.93	.04				T.		.46	.06				.01		.02		.04		1.61
Redfield ‖	James													4.00		.40											.18		.19		.10	4.87
Rochford	Cheyenne					T.	.10					.05	T.	1.00				.25	.05		.66					.10		.02		T.	T.	2.23

TABLE 2.—*Daily precipitation for April, 1912. District No. 6*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
South Dakota—Con.																																
Rosebud	White						T.					T.		T.	.55	.05					.20	.30					T.	.47				2.57
Rosebud Agency	do										.10				.70						.90	.72						.30				2.72
Roslyn	Big Sioux						T.					T.	T.	3.12	.47	.02						T.	T.			3.53	.58	.05				7.77
Selby	Missouri											T.	.59	.18	T.											.15		.15			.03	1.10
Sioux Falls ||	Big Sioux					T.	.03						.10	.30	.20	T.					1.14	.07			.15	.90		T.	T.			2.89
Sisseton ||	Minnesota												.09	3.66	.57								.17			2.00	.35	.05			6.84
Sorum	Owl					T.	T.					.04	.60	.65	.25				T.								T.		.06	.26	1.86
Spearfish	Cheyenne					T.	T.					T.	T.	1.00	.60			.10	T.		.13	.22				.08						2.13
Stephan	Missouri					T.	T.						.29	*	*	.48					T.	T.			T.	T.	T.	.30				1.07
Tama	Cheyenne													.50	.25	.25																1.00
Timber Lake	Grand					T.	.10					.14	.09	.44	.02	T.					T.					T.					T.	0.79
Tyndall	Missouri						T.							1.21	.16	.07					T.	1.20				.03	.31	.03	.08			3.09
Vale	Cheyenne					.07	.02					.05	.17	1.61	.46	T.		T.	.03		.05	T.				.15	.04				T.	2.65
Vermilion	Missouri						.25					.05		.22		.03					.08	.98				.09	.48		T.			2.18
Waters Ranch	Cheyenne					.09	.03						.02	2.83	.44	.09		.06	.08		.13	.22				.02						4.01
Watertown ||	Big Sioux						.07	T.						*	3.25	.17	.03						.10				*	1.45	.09			5.16
Wentworth	do													1.24	.26	.12						1.44				.62	.80	.03				4.51
Wessington Springs	James	.01				.20								1.59	.13	.20						.40				.33	.40	.15			.01	3.42
White Lake	Missouri						T.							1.00	.18							.97					.19	.10				2.44
Winner	White					.07	.03					.02	.14	.27	.03						1.58					.04		.17				2.35
Yankton	Missouri						.05						.01	.70	.12	T.					1.04	.56				.57	.04	.10				3.19
Minnesota.																																
Pipestone	Big Sioux						T.							.45	.10		.16					.52				.36	.77		.02			2.38
Colorado.																																
Akron	Republican									.26	T.			.44			T.		.16	.17	.09	.11							.65		T.	1.88
Albion Lake	South Platte	.10				.05					.10			.40		.33		.40	1.67	.05	.40		.27			.27		.10				4.14
Arriba	Republican												T.	.04			.04	.03	.18		.51	.10				.08			.61			1.59
Auldhurst	South Platte	.08									T.				T.	.05	T.	T.	1.40		T.	.07				T.	T.	T.	.88			2.48
Bennett (near)	do																															
Boulder	do												T.				.17	.19	.97	.05	.05	.09						.06	.13			1.71
Burlington	Republican	T.								T.				.17					T.		.05	.02				.07		.90	.58			1.79
Cassells	South Platte	T.									T.		T.	T.			.15		.70	T.						.10		.15				1.10
Castle Rock	do	T.																	.80	.05	T.	.08	T.				T.		T.			0.93
Cheesman	do	T.				T.	T.		T.		.02		T.				.10	.02	.02	.50	.30	T.	.04	.08		T.		T.	.20			1.28
Cheyenne Wells	Smoky Hill	.02					T.		T.		T.			.11					.11	T.		.22	T.	T.		T.	T.	.17				0.63
Cope	Republican				.60				.55					.65					.05									.13				1.98
Corona ||	South Platte	.48					.34				.34			.70	.64		.34		.84		.32	.24		.62			.48		.46			5.80
Denver	do												T.			.01		.29	.31	.06	.03	.04	T.			T.	.10	.05				0.89
Edgewater	do																															
Estes Pk. Fish Hatch	do						T.				.07		.05	T.		.14		.48	.24	.16	T.	.40	.16	T.	T.	T.	T.	.12				1.82
Fort Collins	do																	T.	.37		.44	.09										0.90
Fort Lupton	do	.02											.06						1.00	T.	.10	.15					T.					1.33
Fort Morgan	do																	.06	.38		.05	T.										0.49
Frances	do	.04				T.					.13		T.	.70	.44	.04	.10	.70	.40	*	.48	.30	.07	.05		.05	.20	.42				4.12
Frys Ranch	do					T.	.11				.02		.01	T.		T.	.10	.26	.15	.01	.40	.18	.02				.13	.22				1.61
Georgetown ||	do					T.					.01	.07	.06	.02		.29		.39	.02	.09	T.	.08	.06		.01	.05	.04	.22				1.41
Greeley	do												.01					*	1.21	*	.25	.06						.08				1.61
Grover (near)	do																															
Hartsel	do										T.		.01			T.	.04	.47	.10	T.	T.						T.				0.62
Hawthorne	do																.22	.17	.86		.09	.20	.02				T.	T.	.21			1.79
Holyoke (near)	Republican								T.		.04			.10							.06	.10						.18			.43	0.91
Idaho Springs	South Platte										T.							T.	.54		.35		.05			T.	T.	T.				0.94
Keota	do											T.					.10	1.25			.47							.18				2.00
Laporte	do																	.03	.03													0.06
Leroy (near)	Republican								.08		.04			1.31					.09	*	*	.64				T.		.24	.11		.11	2.02
Longmont ||	South Platte											.02				.03		.71	.09	.15			.26									1.26
Longs Peak (near)	do															.27	.10	.75	.58	.58	.33		.05				.05	.33				3.04
Moraine	do													.10				.30		.10												0.50
Platte Canon	do																				.20	.40										0.60
St. Cloud	do					T.	.11				.03		.02	.04		.03	T.	.19	.30	.03	.17	.05	.38	.15		.03	.12	.17				1.82
Sedgwick	do					T.					T.			T.					T.		.52	.10							.02	.02		0.66
Sill Mine	do	.23				T.	.40				.25		.22	1.50	.90	T.	.30	.20	.20	.10	.35	.12	.04	.10		.18	.10	.32	.22				5.73
Spicer (near)	North Platte										T.	.14	T.	T.	.08						.09	.03	T.					T.				0.34
Sterling	South Platte													.67					.11	.15	.21	.14						.22			.02	1.52
Waterdale	do																															
Wray	Republican										.03			.51					.02		.15	.11						.70				1.52
Yuma	do										.02			.40							.12	.08	.02			T.		.22				0.86
Nebraska.																																
Ainsworth	Niobrara						.26				T.		T.	.28	.42			T.			*	1.25				.85		.15	.51		T.	3.72
Albion	Loup						.19				.22			.36							.45	.24				.39						1.85
Alliance	North Platte													.65					T.	T.	1.00	.25						.25				2.15
Alma	Republican												.04	.30						T.	.72	T.		.02				T.	.23			1.31
Arcadia	Loup			T.			T.					T.	.60	T.							.86	T.			T.	.56	T.	T.		T.	T.	2.02
Arden	do					.09	.05				.06		.57	T.							.87	.02				.58						2.24
Ashland	Platte						.06							.25						T.	.59	.16				T.			.23	.17		1.46
Ashton	Loup	T.					.02					.03	.62								1.31								.07		T.	2.05
Atkinson ||	Elkhorn							T.						.35	.05	T.						.65	.45		T.			T.	.65			2.15
Auburn ||	Missouri	.12						T.					.01	.08								.25					.07		.45	.92		1.90
Aurora	Blue					.18								.48							.28					.15			.25			1.34
Beatrice	do						.01						.02	.10							.39	.50				.07			.56	.39		2.04
Beaver City	Republican						.09				.09			.04	T.						.54	.04		T.					.60			1.40
Bellevue	Missouri						.08			T.	.03		T.	.13					T.		.41	.40				T.			.25	.46		1.76
Benkelman	Republican																				.49							2.10	1.40			3.99
Bertrand ||	do													.09							.07	.49	.05						.26	.15		1.11
Blair	Missouri	.01					.11					.11	T.	.19							.78	.74		T.	T.	T.			.16	.26			2.36
Bloomfield	do						T.							.70	.05	T.					T.	1.10				T.	.75						2.60
Bradshaw ||	Blue						T.						T.	.50								1.38	T.				.05	.75		.13		2.79
Bridgeport	North Platte										.05			1.25	T.			T.	T.		1.10	.15				T.			.20		T.	2.75
Broken Bow ||	Loup	T.					T.				.20		.18	.10							.53	.62				.25		.08	.28		T.	2.24
Bruning	Blue	.01		T.			T.						T.	T.							1.46	.42		T.					.20	.05		2.14
Burge	Niobrara																															
Butte	do						.05							1.01	.30	.11					.13	1.10				.38	.06	.05	.26			3.45
Cairo	Platte			.05			.15							.25							.82						.26		.49			2.02
Calloway	Loup																															
Cambridge	Republican						T.		T.		.12		T.	T.							.25	.25		.03		.02			.96			1.63
Columbus ||	Loup	T.					.14	.14				.14		.41								1.26	T.				.02		.03	.12		2.20

TABLE 2.—*Daily precipitation for April, 1912. District No. 6*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Nebraska—Contd.																																
Crete	Blue						.08							T.							2.42					T.			.20	.14		2.84
Culbertson ‖	Republican	T.										.02									.12	.90	T.			T.			.98	.46		2.48
Curly	North Platte					T.					.16		T.	.50					T.	.05	T.	.48	.09				.02		.18				1.48
Curtis	Republican					T.						T.		T.	T.						.49	.80				T.		.31	.98			2.58
David City	Blue	.10					.17					T.		.20							.90	.68				T.			.35	.03		2.43
Du Bois	Missouri	.35												.30							.10	.28				.03			.90	.72		2.68
Dumas	Loup						.10					.04	.16	.65	.01						.42	.20				.09		.08	.04			1.79
Elm Creek ‖	Platte					.20							.28								.90								.49			1.87
Elsie ‖	Republican								.03												.33	.35			.07		T.		1.55	.01		2.34
Ericson (near)	Loup						.10						.12	.73	.02						.30	.33				.95		.04				2.59
Ewing ‖	Elkhorn						.18			.10				.53		T.						.74				.18		.03				1.76
Fairbury	Blue						T.						.10								1.95	.03				.03		.54	.42		.74	3.81
Fairmont ‖	....do	.03					T.	T.					.04	.46								1.18					T.			.02	.06	1.79
Falls City	Missouri	.50												T.				T.								T.			.92			1.42
Fort Robinson ‖	White											.16		.10	.33	.78			.16	.04	.14	.75							.04			2.50
Franklin	Republican					.07	.09						T.	.12						.06	.78							.14			1.26
Fremont	Platte						.10					.05	.05	.28							1.80								.15			2.43
Fullerton	Loup						.31														.90	.29				.47			.61			2.58
Geneva	Blue	.03					T.													T.	1.12	T.				T.			.16	.06	.09	1.46
Genoa	Loup	T.					.20			.01		.07	T.	.11	T.						.44	.58				T.	.13		.22			1.76
Gordon	Niobrara										.16				.20				.04		.50	.22				.15		.38				1.65
Gosper	Republican						.06				.33		.09								.70					.03			.66			1.87
Gothenburg	Platte						T.							T.							.95	.70				T.		.40	.65		T.	2.70
Grand Island ‖	....do	T.					.15					.04		.13								.98					.18		.08	.30		1.86
Grant	Republican										T.			T.							.27	.12				T.		.37			.15	0.91
Greeley	Loup	.23					.14				.09			.87												.53		.04				1.90
Guide Rock	Republican						.06							.70							.72					.03			.20			1.71
Halsey	Loup													T.	.07						.81	.41						.01	.40	T.	.01	1.71
Hartington ‖	Missouri						.14					T.		.30	.22							1.02	.22				.46						2.36
Harvard	Blue					.02								.66							.76	T.		T.		.10			.23	.05		1.82
Hastings ‖	....do	T.					T.							.40								T.	.80							.58		1.78
Hayes Center	Republican																				1.40							1.90				3.30
Hay Springs	White					T.	T.				.22			.50	.50			T.	T.		.60	.30				24		.32				2.68
Hebron	Blue	T.					.02						T.	T.							1.44	.47	.02	T.		T.			.47	.17		2.59
Hemingford ‖	Niobrara	.02										.23		.29	.56				.48		.30	.41	.01				.06	.37				2.73
Hendley ‖	Republican										.20		.02								.43							.40	.40			1.45
Hershey ‖	South Platte																			.02	1.25							1.30	.10		.25	2.92
Hillside	North Platte						.01				.01	.01		.05	T.						1.01	.21				.01		.01	.04		.03	1.39
Holdrege ‖	Republican						.02							.46								.95	.02							.35		1.80
Hooper	Elkhorn											.12		.23							1.25	.45					.10		.15			2.30
Hull (near)	North Platte										.24			T.	.29						1.11	.36				12						2.12
Imperial	Republican										T.			T.							.55	.20	.15	.03		T.		1.82	T.		.10	2.85
Kearney	Platte											.04		.64												.82			.18			1.68
Kimball	South Platte										.10			.35	T.		.23	.31	T.	.22	.80	T.						.15			T.	2.16
Kirkwood	Niobrara						.10						.34		.30							.73				.50		.58				2.55
Kowanda ‖	North Platte										.07			.13	.04						.54	.02		T.				.12			T.	0.92
Lamar	Republican								.13										T.		.25	.06				T.		.19	.31		.28	1.22
Lexington	Platte						.05					.02		.27	.05						.45	.15		T.		.02			.13			1.14
Lincoln	....do						.04					T.	.02	.04						T.	1.93					.05	T.	.01	.28		.13	2.50
Lodgepole	South Platte										T.		T.	.16				T.		1.20	.08							.08		T.		1.52
Loup City	Loup						.12					.04	.03	.34							.98					.28				.06		T.	1.85
Loyal	....do																				2.60							.90	1.00			4.50
McCook	Republican																				.55			.08					1.38			2.01
McCool Junction ‖	Blue						.10				T.		.80								1.27	T.							.14			2.31
Madison	Elkhorn						.25					.20		.78						.30	.55					.62			.22			2.92
Marquette	Blue	.02					.17					.03		.20							.68					.27			.46			1.83
Mary	Loup						.12					T.	.17	T.	.12						.81	.95				.08		.03	.40			2.68
Mason City ‖	....do										.38	.12								.75						.35						1.60
Minatare	North Platte										.08			.30				.40	.60		.88							.20				2.46
Minden	Blue						.23		T.		T.		.43								.83								.65			2.14
Mitchell	North Platte										.16	.03		.50	.06			T.	.08		.94	.09	.01					.15	T.			2.02
Nebraska City	Missouri													T.							.60					T.				1.20	.50	2.30
Nelson	Blue												.47								.86							.25				1.58
Norfolk	Elkhorn						.25					.09		.43				T.			.24	.92				.28	.52	.02	.06			2.84
North Loup	Loup						T.							.35	.25						.75	T.				1.00		T.	T.			2.35
North Platte	Platte													.01							1.00	.11						1.61	.05		.15	2.93
Oakdale	Elkhorn						.19				T.	.04		.84							.40	.25				.49		T.				2.21
Omaha	Missouri						.07			T.	T.	.03	T.	.10				T.		T.	.66	.04				.01			.38	.02		1.31
Ord	Loup													.57								.97					.97					2.51
Orleans ‖	Republican				.10								.37								.97								.37			1.81
Osceola	Blue																															
Palisade	Republican																			.51	.10							1.27	.34			2.22
Palmyra	Missouri						.05						T.	.38							.80					.04			.76			2.03
Pawnee City	....do	.25											T.	.10							.35					.12		1.45				2.27
Paxton	South Platte										.05			.03	.20						.35	.17						*	.20		.25	1.25
Plymouth ‖	Blue						.05							.05							1.30								.80			2.20
Purdum	Loup	.03					T.							T.	.04						.80	.70				.01		.07	.19			1.84
Ravenna	....do						.19					T.	T.	.70	.02						.87	T.				.57		T.	.21		T.	2.56
Red Cloud	Republican	T.					.04					T.		.20							1.00	T.		T.		.04			.12	.04		1.44
St. Libory	Platte						.16					.06		.82							.91	.04				.35			.25		T.	2.59
St. Paul	Loup						.17				.04			.80							.59	.11				.25			.25			2.21
Santee	Missouri													.98	.09	.11					.10	.73					.25	.04	.13			2.43
Sargent ‖	Loup																															
Schuyler	Platte	.03					.23					T.	.02	.23				T.			.70	.82				T.	.07		.08	T.			2.18
Scottsbluff	North Platte										.22		T.	.85	T.				.03		.38	.06						.09			T.	1.63
Seward	Blue											T.	.40								2.00								.20		T.	2.60
Sidney	South Platte										.10			1.10	.08				.10		.85	.20						.08	.08		.07	2.66
Springfield ‖	Platte						T.					T.	.01	.01				T.		T.	T.	.54				.01			.02	.53		1.12
Springview	Niobrara						T.						T.	T.	.65						.33	1.11				.05	.10	.15	.10			2.49
Stanton	Elkhorn						.25					.18	.20								1.02	.21					.55		.10			2.51
Stratton ‖	Republican																		.68		.82						1.67					3.17
Superior ‖	....do																					1.30							.20			1.50
Syracuse	Missouri						.05					T.	.02	.19				T.			.41					.03		T.	.51	.53		1.74
Table Rock	....do	.14					.04						T.	.14							.15	.18				.10			.97	.71		2.43
Tecumseh	....do																															
Tekamah ‖	....do						.20					.40	.02		.44						1.00	.44							.08	.10		2.68
University Farm	Platte	.01					.08					.05									.95	.76				.07			.19	.12		2.23
Valentine	Niobrara					.12	T.				.03			.30	.12						1.29	.37				.01		.12				2.36
Wahoo	Platte										.15		.10								1.57								.27			2.09
Wakefield	Elkhorn						.24					.10		.22		T.					.46	.74				.61			.18			2.55
Walthill ‖	Missouri						.30		T.				.18	.81								1.10										2.39
Watertown	Platte					.15															.97					.38	.01		.40			1.91

TABLE 2.—*Daily precipitation for April, 1912. District No. 6*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Nebraska—Contd.																																
Wauneta	Republican						.07					T.	.04	.14				T.		T.	.85							1.75	.22			2.82
Weeping Water	Missouri						.87							T.	T.						.35	.16				T.			.65	.36		1.77
Westpoint	Elkhorn	T.					.35							.18							.58	.84				.08	.64		.18			2.85
Wisner	....do						.59							.48		.07					.02	.68			.09	.26		.05				2.24
York	Blue	.32					.05					T.	T.	.66							1.10					.12			.03	.05		2.33
Iowa.																																
Afton	Grand	.38					.11			.11		.17	1.02	.51				.20			T.	1.30				T.			.64	.60		5.04
Allerton	Chariton	.64					.02	T.				.03	.33	T.				.65	.12			.40	T.			T.	.13		.38	.23		2.93
Alton	Floyd						.59							.48		.07					.02	.68			.09	.26		.05				2.24
Atlantic	Nishnabotna						.23			.03	T.	.23	.45	.53				.03		T.	.29	.75				T.	.05		.78	.22		3.59
Audubon	....do						.15			.05		.20	.45	1.00							.30	.90					T.		.75	.10		3.90
Bedford	Missouri	.45					.07			.04		.08	.07	.29				.10			.01	.71				.03	.03		.40	.40		2.68
Centerville	Chariton	1.00								T.		.06	.40	.02				.50				.30				.01	.04		.38	.13		2.84
Chariton	....do	.55					T.					.15	.65	T.				.45	T.		T.	.65				T.			.30	.42		3.17
Clarinda	Nodaway	.30					T.	T.				T.	T.		.02			.10	.16			.86					T.		.30	.87		2.61
Corning	....do	.15					.11						.06	.40				.10			T.	1.70				.02			.75	.80		4.09
Corydon	Chariton	.73					T.					.08	.30	.03				.46	.13			.39	T.			T.	.17		.22	.14		2.65
Council Bluffs	Missouri						.05			.04		.02	T.	.15	T.			T.		T.	.64	.36							.34	.38		1.98
Creston	....do	.30					.05	.05		.05	.05	.21	1.48	.24	.75			.05	.07			1.00					.01		.33	1.02		5.66
Cumberland	Nodaway						T.						.49	.61						.22	.20	.50					.14		.19	.80		3.15
Denison	Missouri						.15					.05	.09	.49	T.						.25	.83							.34	.11		2.31
Elliott	Nishnabotna						T.			T.	T.	.42	.10	.12							.28	.52					.07		.47	.45		2.43
Greenfield	Nodaway						.05			T.		.27	1.27	.13				.09			.05	.95							.75	.40		3.96
Harlan	Nishnabotna	T.					.05			.07		.25	.55	.83							.75	.13				T.	.05		.56	.14		3.38
Inwood	Big Sioux						.13							.36	.08	.06					.02	.88				.04	.37		.05			1.99
Lamoni	Grand	.14					.01				.02		.01	.10				.39	.01			.75				T.	.12		.72	.27		2.54
Larrabee	Little Sioux						.28							.41	.05	.06						1.55				.21	.55		.26			3.37
Le Mars	Floyd						.25					.03		.64	.01	T.	.01				.05	.83				.08	.15		.09			2.14
Lenox	Missouri	.35					.05			.10		.10	.40	.37				.25			.05	.90				T.	.10		.80	.42		3.89
Leon	Grand	.60					T.			T.		T.	.10	T.				.35				.98				T.	.10	T.	.25	.40		2.78
Little Sioux	Little Sioux						.18			.07		.20		.64							.51	.74							.10	.15		2.59
Logan	Missouri						.15					.14	.10	.72							.58	.61							.25	.27		2.82
Mount Ayr	Grand	.40					.05			.05	T.	.16	.02	.03				.31				.97				T.	.01		.72	.43		3.09
Murray	....do	.49					.07			T.		.25	1.30	.32				.20			T.	.91				T.			.56	.58		4.68
Northboro	Missouri	.20					.01			T.			T.	.15				.20			.15	.76				T.			.42	.72		2.61
Odebolt	Little Sioux						.18					.05	.35	.03							.35	1.06							.66			2.68
Onawa	Missouri	.10					.30			.10		.23		.75							.45	.70				.05	.15		.20	.02		3.05
Pacific Junction	....do	T.					.02	T.				.02	T.	.16		T.		T.		T.	.38	.32				T.			.68	.54		2.12
Rock Rapids	Big Sioux						T.							.55	.05							.71				.10	.27		.04			1.72
Sheldon	Floyd						.60							.25	T.							.85				.08			T.			1.78
Sibley	Big Sioux						.11	.14							.48	.16						.87	.08			.03	.26		.03			2.16
Sioux Center	Floyd						.07							.73	.17						T.		.75			T.	.35		T.			2.07
Sioux City	Missouri	T.					.24					.04		.40	.01						.88	.01				.29			.11			1.98
Spencer	Little Sioux						.50							.27	.02	.08						1.42		.60		.10		.85				3.84
Thurman	Missouri	T.					T.			T.		.02	.03	.04				T.		T.	.16	.54				T.	T.		.52	.54		1.85
Washta	Little Sioux						.20							1.00		.05					1.20	T.				.60			.26			3.31
Kansas.																																
Abilene	Smoky Hill	.18												.16								.10			.04				.30	.14		0.92
Agricultural College	Kansas	.35											.10								.50		T.	T.		.20		T.	.20	.05		1.40
Alton	Solomon	T.					T.		T.					T.							1.04	T.	.02	.05		T.		T.	1.06	.12		2.29
Atchison	Missouri	.10								T.		T.						.10				.30				.20		.50	.10			1.30
Beloit	Solomon	T.	T.											T.							T.	.38	.05		.07		T.		.55	.58		1.63
Blakeman	Republican																				.54	.22				.08		.03	.66			1.53
Blue Rapids	Blue	.15		T.						T.				.14								.12	.02				.07		.49	.59		1.58
Centralia	....do	.40					T.					.01		.35				T.		T.	.80	1.14	.01	.01		.08			.85	.10		3.75
Chapman	Smoky Hill													.13						T.	.63		T.				.07		.40			1.23
Clay Center	Republican	T.												T.							.25		T.	.15					1.00			1.40
Colby	....do						T.							T.							.05	T.			.05			T.	.88		T.	0.98
Concordia	....do						T.							.03							.19	.06		.14		T.		.38	.55			1.35
Densmore	Solomon													.08							.67	.02		T.				T.	.32			1.09
Dresden	Republican						T.					.24		T.	T.						.08	.10	T.				T.		.20	.32		0.94
Ellsworth	Smoky Hill	.04												T.							.27			T.					.93			1.24
Enterprise	....do	.44												.07							.79					.16			.16	.04		1.66
Eskridge	Osage	.71					T.						T.	.20								.58	.03	T.		.16			.70			2.38
Farnsworth	Smoky Hill						T.							T.				T.		T.	.79	T.						.04	.75			1.58
Fort Scott	Osage	.35	1.25									T.	.23									.11			T.	.25	1.37		2.86	.30		7.24
Frankfort	Blue	.25												.25							.14	.18		.05		.09			.19	.76		1.91
Garnett	Osage	.48	.49										.04	T.				T.	.38		.06	.55		T.		.42	.11		1.93	.27		4.73
Goodland	Republican																															
Gove	Smoky Hill																															
Hanover	Blue	.04					T.	T.				T.	T.	.08								.33	.07		T.		.06		.67	.50		1.75
Harrison	Republican	T.					.01		T.					1.90							.78	T.		T.					.27	.04		3.00
Hays	Smoky Hill	T.							T.					.07							.23	.02						33	1.01			1.66
Hill City	Solomon						T.														.96	T.						T.	.17	T.		1.13
Horton	Kansas	.47												.03				.02	.04			.57	.04				.50		.02	.24		1.93
Hoxie	Solomon						T.														.25	T.							.44			0.69
Lawrence	Kansas	.13															T.		.35		T.	.03				.20		.10	.30	.15		1.26
Leavenworth	Missouri	T.				T.					T.						.52	.04			.52			.05		.11		.13	.05			1.42
Lebanon	Solomon																				.85								.10	T.		0.95
Leoti	Smoky Hill	.02												T.					.02	T.	T.	T.							.26			0.30
Lincoln	Saline													T.							.48			T.		T.			1.28	.05		1.81
Lindsborg	Smoky Hill																							.09			.08	.04				0.21
McCracken	....do								.05					T.							T.		.02					.40	1.40	.01		1.88
Minneapolis	Solomon	T.											.01	.03							.09		.02	.03		.02		T.	1.59			1.79
Moran	Osage	.50	.85									.18	T.				T.	.26		T.	T.	.28		T.		.56	.37	T.	2.20	1.42		6.62
Natoma	Saline																				1.60								1.50			3.10
Norton	Republican						T.							.21							.65	T.							.48			1.34
Oberlin	....do				.03						T.										.26	.05					.04		.58			0.96
Oketo	Blue	.10			T.	T.	T.		T.		T.			.10							.15	T.		.01		.13			1.31	.39		2.19
Olathe	Kansas	.46	.02															.24	T.	.02		.17		T.		.30			.85			2.06
Ottawa	Osage	.40	.22															.31		.01		.02				.38			.90			2.24
Phillipsburg	Solomon						.05						T.	.32							1.66	T.	T.	T.					.80	.05		2.88
Plainville	Saline								T.					.05							.75	T.						.15	.55			1.50
Pleasanton	Osage	.40	.72									.02	T.					.40		.02		.50				.67	.21		2.08	.90		5.92
Quenemo	....do	.57	.19															.34		T.	T.	.01				.41		.11	.46	.02		2.11
Republic	Republican						T.														1.82			.02				.42	.42	.08		2.76
Russell	Smoky Hill													T.							.32	T.							2.15			2.47
Russell Springs	....do	.04									T.		T.	T.				.08		.03	T.	.02							.10			0.27

TABLE 2.—*Daily precipitation for April, 1912. District No. 6*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Kansas—Continued.																																
St. Francis	Republican								T.		T.			.23							.65	.01				T.		2.20	1.09			4.18
Salina	Smoky Hill	.16								T.			.02	T.							.15	T.		T.	.15			T.	.38	.04		0.90
Scott	do	T.																	T.		.24							.16	.86			1.26
Smith Center	Solomon						T.		.01					T.						.12	1.02	T.	.03			T.			.12	T.		1.30
Topeka	Kansas	.32								.02	T.		T.					.04			.32	T.	.01	T.		.12		.11	.17			1.11
Valley Falls	do	.70								.01								.21			T.	1.05		.05		.05			.17	.05		2.29
Vinland	do	.90	.06							T.	T.							.26			T.		.05			.35			.59			2.21
Wakeeney	Smoky Hill						T.						.05								1.00	T.						.21	.39			1.65
Wallace	do	.04																			.08							.26	.04			0.42
Wamego	Kansas									T.			T.	.25							.35			T.		.90		.10	.11			1.71
Missouri.																																
Amoret	Osage	.30	.75								T.	T.	T.				.40	.38	T.			.53		T.		.46	.38		1.95	.88		6.03
Appleton City	do		.98														.17	.33				.23				.52	1.02		1.99	.50		6.06
Arlington	Gasconade	T.	.45								T.			.10	T.			.40	.16		.30	.35					1.80		.60	.36		4.52
Arthur	Osage	.33	1.00				T.			T.		.18	T.				.33	.35		.03		.18			.67	.65		2.10	.98			6.77
Avalon	Grand	.54					.10											.60				.40							.45			2.09
Bagnell	Osage	.05	.76					.02						.01				.97	.39		.30	.50					2.20		1.90	.54		7.64
Bethany	Grand	.25											.20					.40									.14			.30		1.29
Bolivar	Osage	.42	.60										.08					.80		.25		.54				.65	1.37		4.04	.04		8.79
Boonville ‖	Missouri	.09	.28				T.	.02							.50			.60	.08			.46	T.				.66		.94	.15		3.78
Brunswick ‖	Grand	.34	.03				.03							.16	1.88			.60	.16			.42					.13		.56	.11	T.	4.42
Clinton	Osage	.10	.85															.60				.25				.60	.50		1.70			4.60
Columbia	Missouri	.27	.27				.04			T.			.02	.12			.04	.35	.01	.03	.04	.73	T.			.73	.17	.02	2.33	.17		5.34
Conception	do	.74					T.											.29			T.	1.15				.05			.12	.37		2.72
Crocker	Gasconade	.44	.58				.05						.06	.06				.80		.30	.02	.40				1.04	2.22		1.74			7.71
Eldon	Osage	.20	.86				.05						.04				T.	.76		.05		.64				.55	1.75		2.50	.40		6.80
Eldorado Springs	do	.21	.85							T.		T.	T.				.26	.39		T.		.53				.85	1.30		2.05	.26		6.69
Fayette	Missouri	.22					.03					T.	.15	.16			.20	.30		T.		.42				.62			.79	.29		3.18
Fulton	do	.90	.50					.10						.10	.15			.67	.04		.17	.46				.08	1.05		2.33	.20		6.75
Glasgow ‖	do	.18	.06				.04	.18							.32			.42		.08		.08					.48		.68	.26		2.78
Grant City	Grand	.44									.10	T.	T.				T.	.44		T.	T.	1.00				T.	.50	T.	.45	.30	T.	3.23
Harrisonville ‖	Osage	.16	.37				T.				.22	.17	.03					.32	.03		.02	.54					1.11		1.38	.25		4.60
Hazelhurst	Grand	.62					T.				T.	T.						.55			T.	.26					.15		.29	T.		1.87
Hermann ‖	Missouri	.02	.52					.04			T.		T.	1.72	.28			.74	.10	.01	.06	.18			.02		2.86	.04	1.12	1.28	.02	9.01
Houston	Gasconade	.50	.50				.75			T.			.25	.50			.08	1.08		.11		.75				.85	.82		.84	.10		7.13
Jefferson City ‖	Missouri	.20	.55				.01	.22						.02	.04			.48	.07		.01	.60					1.63		2.05	.95	.03	6.86
Kansas City	do	.30															.17	.09			.15					.19		.09	.54			1.53
Kidder ‖	Grand	.56											.55					.22	.15			.35					.06		.06	.17		2.12
Lamonte	Missouri	.19	.72								T.	T.	.10	T.			.20	.65		T.	T.	.30	T.			.21	.61		1.30	.08		4.36
Lebanon	Osage	.50	.65										.14	.25				.62		.30						2.30	.15		1.72			6.63
Lexington ‖	Missouri	.43	.05				.02					T.	.05	.02				.52	.08			.70					.21		.81	.13		3.02
Liberty	do	.57																.05				.22				T.			.47			1.31
Lockwood	Osage																															
Marshall	Missouri		.35				.15					.26		.45			.12	.65		T.	.05	.33				.03	.63		.86	.13		4.01
Maryville ‖	do	.20					.02			.03								.12	.11			1.18					.10		.11	1.00		2.87
Mount Vernon	Osage	.27	.36				.20			T.	.04						.45	.28		.38		1.15				.60	T.		4.00	.30		8.03
Nevada	do	.38	.57						T.	T.	T.	T.					.25	.25		.05		.93				.75	.90		3.55	.26		7.89
Oregon	Missouri						.03			T.			T.					.24			.75					.07			T.	.09		1.18
Pattonsburg ‖	Grand	.60					T.							T.				.23	.11			.40					T.			.35		1.69
Rolla	Gasconade	.15	.84				.02			T.			.10	T.	.02		.06	1.18		.25		.34				.75	1.37		1.80	.08		6.96
St. Charles	Missouri	T.	.61				.35			T.			.99	.05	.18			.99		.10		.05		T.		10	1.32		.92	.89		6.55
St. Joseph	do	.51					T.			T.		T.					.06	.26			.66					.22		T.	.13			1.84
St. Louis (1)	Mississippi	.10	.89			T.	.26			T.		T.	1.46	.74	.01		.18	.73				.08	T.			1.10	1.66		.54	.05		7.84
St. Louis (2)	do	.12	.83				.57			T.			1.29	.05	.60		.09	.86		.04		.08	T.			.53	1.96		.57	.07	T.	7.66
Sublett	Chariton	.75					T.					T.	.50	2.00				1.00	.25			.20				T.						4.70
Trenton	Grand						.11			T.			.24	.11			.24	.24			.26					.09		.19	.15		T.	1.63
Unionville ‖	Chariton	.35					T.	T.			T.	T.	.66	.10				.25	.45			.66					.10		.04	.36	.06	3.03
Warrensburg	Missouri	.21	.41				.03			T.	T.	T.	.14	.26			.07	.72		T.		.72		T.		.12	.50		1.29	T.	T.	4.47
Warrenton ‖	do	.04	.58					.14			T.			2.18	.88			1.20	.30		.05	.20	.01	T.			2.47	.42	1.57	1.66	.01	11.71
Warsaw	Osage	.13	.88							T.		.07	T.	T.	T.		.15	.48		.04		.54				64	.74		2.78	.64		7.09
Wheatland	do	.70	1.00														.70									20	2.40		2.70			7.70

* Precipitation included in that of the next measurement.
† Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations for April, 1912. District No. 6, Missouri Valley.*

Date.	Wyoming.																Montana.											
	Basin.		Cheyenne.		Fort Laramie.		Lander.		Newcastle.		Pathfinder.		Sheridan.		Yellowstone Park.		Billings.		Dillon.		Havre.		Helena.		Lewistown.		Malta.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	.....	.....	43	23	55	23	47	17	51	22	48	23	56	27	51	17	65	29	58	28	60	26	57	31	54	27	52	25
2	.....	.....	51	29	64	29	56	24	60	22	52	30	62	34	50	28	71	32	60	30	68	40	66	40	60	30	66	33
3	.....	.....	62	33	70	34	59	25	66	30	54	34	66	28	48	27	73	29	64	29	71	35	62	37	66	31	75	30
4	.....	.....	62	38	72	36	60	30	70	33	56	35	66	38	45	32	71	32	62	26	60	32	56	38	55	30	65	31
5	.....	.....	62	21	70	39	53	27	61	34	51	40	48	32	41	19	51	36	59	30	51	31	43	29	63	32	58	38
6	.....	.....	39	21	48	30	46	22	40	27	47	21	47	28	44	12	56	22	50	31	51	26	52	26	72	36	50	31
7	.....	.....	60	27	72	22	63	24	54	34	57	33	68	28	52	22	74	34	70	33	73	29	68	31	61	37	67	29
8	.....	.....	61	32	74	27	63	31	72	40	60	31	67	31	61	27	73	28	72	32	70	37	70	37	59	33	68	35
9	.....	.....	62	33	73	33	65	32	68	38	63	30	72	32	59	30	80	29	67	30	72	40	69	39	62	34	74	34
10	.....	.....	61	36	72	59	56	36	70	44	61	34	73	31	48	30	81	31	68	33	73	42	68	41	71	39	72	41
11	.....	.....	57	31	69	38	56	34	64	34	56	32	63	40	47	28	67	41	65	30	52	41	58	40	72	40	62	42
12	.....	.....	55	32	63	40	54	31	60	40	55	36	42	33	39	27	41	33	60	29	42	32	43	34	45	27	44	33
13	.....	.....	42	28	39	32	48	27	44	28	45	31	36	30	35	24	38	33	64	29	36	32	36	28	42	27	37	29
14	.....	.....	44	32	36	28	44	31	32	28	39	26	34	30	41	25	44	32	70	30	45	31	45	31	32	27	44	28
15	.....	.....	45	26	45	27	52	28	42	24	45	22	47	24	48	26	47	26	64	28	48	26	54	29	42	20	44	18
16	.....	.....	52	26	55	28	56	29	57	28	53	31	52	25	42	27	49	28	60	33	53	30	49	36	72	32	50	26
17	.....	.....	41	26	50	33	50	29	44	30	47	33	45	30	47	28	50	37	60	32	57	35	52	37	69	34	53	27
18	.....	.....	37	28	51	37	51	30	52	34	54	29	52	25	45	30	55	27	62	33	57	30	51	35	51	22	57	29
19	.....	.....	39	25	47	30	47	29	50	34	48	32	52	31	41	22	54	34	54	32	57	31	48	35	55	29	56	38
20	.....	.....	34	29	37	29	40	25	46	40	43	29	46	35	35	20	52	38	47	32	57	28	52	34	53	19	56	28
21	.....	.....	36	28	43	32	39	27	46	32	40	29	50	32	46	24	50	32	58	33	61	28	57	30	54	21	60	28
22	.....	.....	41	17	55	25	47	21	55	24	46	26	58	27	45	27	63	28	60	34	64	30	56	34	62	24	64	30
23	.....	.....	50	27	60	31	57	31	61	30	50	29	61	30	45	30	66	35	63	30	62	39	56	34	65	34	60	40
24	.....	.....	56	30	65	30	60	30	64	32	62	34	68	32	50	29	66	34	65	31	61	38	46	35	65	33	66	38
25	.....	.....	51	33	63	36	50	32	61	40	60	36	51	41	44	29	54	40	51	32	56	36	47	33	60	35	59	44
26	.....	.....	48	32	57	35	54	33	58	32	47	30	52	34	44	27	59	27	58	31	53	31	54	33	51	36	55	29
27	.....	.....	55	37	64	37	56	32	50	32	54	33	58	32	47	28	65	34	61	33	57	37	55	39	58	27	60	36
28	.....	.....	56	35	64	34	56	33	61	32	58	32	65	27	47	30	68	29	60	32	65	33	58	33	63	28	66	36
29	.....	.....	62	35	70	39	58	36	65	40	62	37	71	35	46	33	76	32	56	30	64	38	54	39	57	32	60	40
30	.....	.....	60	39	68	36	56	37	66	45	55	36	62	39	43	31	64	35	54	33	64	38	52	34	61	34	66	35
Mns.	.....	.....	50.8	29.7	59.0	33.0	53.1	29.1	56.1	32.8	52.3	31.1	56.3	31.4	45.9	26.3	60.8	31.9	60.7	31.0	58.7	33.4	54.5	34.4	58.4	30.0	58.9	32.7

Date.	Montana.				North Dakota.										South Dakota.													
	Miles City.		Poplar.		Berthold Agency.		Bismarck.		Dickinson.		Jamestown §§		Williston.		Aberdeen §§		Huron.		Kadoka.		Kimball.		Lemmon.		Pierre.		Rapid City.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	62	29	51	26	51	23	54	26	49	27	54	13	50	28	58	23	57	16	59	24	55	30	.....	.....	57	25	58	28
2	68	42	63	23	60	23	61	29	60	31	55	13	55	29	56	28	56	28	66	31	59	30	.....	.....	63	29	64	42
3	76	38	70	33	74	29	76	32	71	31	76	15	68	35	78	32	75	34	86	35	76	32	.....	.....	78	37	72	40
4	76	42	71	34	75	30	77	34	75	35	79	34	70	39	84	34	81	38	79	45	81	40	.....	.....	81	49	72	47
5	55	42	55	37	59	38	69	38	62	36	74	34	50	37	82	36	81	44	79	47	80	46	.....	.....	79	44	68	41
6	48	35	48	32	47	30	47	30	45	30	43	33	46	31	42	37	45	29	59	33	68	35	.....	.....	46	35	43	27
7	74	32	69	23	65	23	63	27	67	23	58	24	62	28	64	22	61	23	69	24	64	26	.....	.....	69	26	67	26
8	73	36	72	37	68	32	74	33	67	35	78	28	66	38	84	28	80	33	80	38	82	36	.....	.....	80	35	72	36
9	78	44	75	40	78	31	73	32	75	32	69	29	75	41	72	34	70	37	72	35	70	40	.....	.....	70	42	70	38
10	82	40	74	39	73	29	78	41	75	35	76	31	71	42	82	36	77	34	89	43	77	35	.....	.....	78	43	73	41
11	50	47	63	43	61	41	58	41	64	39	70	40	55	44	72	45	75	48	75	40	74	41	.....	.....	73	48	67	42
12	50	32	44	39	50	36	53	33	49	30	62	29	45	34	76	35	75	41	75	30	76	42	.....	.....	73	42	61	38
13	37	32	39	31	44	35	50	40	43	34	50	30	37	32	56	45	63	50	65	35	63	50	.....	.....	64	50	47	31
14	37	30	48	30	37	30	43	31	35	30	43	37	36	32	50	45	51	36	47	33	52	38	.....	.....	52	36	38	30
15	47	25	45	25	36	20	35	28	38	17	37	28	36	21	38	32	38	33	45	31	42	32	.....	.....	45	31	43	32
16	47	21	49	22	47	20	47	24	46	23	46	21	41	22	45	30	37	32	48	27	40	29	.....	.....	46	27	50	26
17	50	30	55	28	55	28	52	26	50	26	52	22	47	29	53	25	48	29	48	25	45	29	.....	.....	50	31	47	30
18	52	30	61	29	57	34	55	30	51	35	59	26	51	34	58	28	55	28	56	27	55	27	.....	.....	56	28	51	33
19	38	31	59	28	62	37	60	41	58	31	63	29	54	39	60	31	60	32	62	37	61	34	.....	.....	61	39	55	31
20	54	40	53	30	.....	.....	55	31	48	35	61	27	46	35	63	32	58	33	51	37	58	36	.....	.....	54	38	43	35
21	58	31	59	21	54	18	48	23	50	21	45	25	54	28	53	30	51	34	48	30	50	31	.....	.....	52	32	45	28
22	65	36	67	31	70	30	61	29	62	27	62	22	62	35	64	26	62	28	61	37	60	25	.....	.....	64	27	56	30
23	65	41	60	49	58	28	59	38	57	32	58	31	56	39	67	30	70	32	67	37	70	35	.....	.....	69	37	62	42
24	69	40	71	38	74	31	74	37	71	31	73	26	69	39	78	29	74	35	76	45	75	37	.....	.....	76	42	67	36
25	56	47	64	47	60	33	73	38	65	38	74	45	56	39	75	45	65	50	68	48	70	39	.....	.....	72	51	61	42
26	59	32	57	26	52	28	52	33	51	29	47	39	49	25	55	45	54	41	69	38	68	42	.....	.....	59	42	54	40
27	66	40	64	37	66	28	62	28	64	27	47	23	63	36	55	29	52	31	53	33	54	28	.....	.....	53	36	57	44
28	71	36	69	32	70	30	63	33	64	27	57	25	62	29	65	35	62	38	60	35	60	40	.....	.....	62	37	61	39
29	74	42	70	47	68	39	61	34	60	44	69	29	65	44	65	30	62	30	69	37	59	34	.....	.....	66	36	70	39
30	65	42	69	45	68	39	69	49	67	33	56	36	67	44	64	35	62	47	74	47	65	45	.....	.....	79	50	69	41
Mns.	60.1	36.2	60.5	33.4	60.0*	30.1*	60.1	33.0	58.0	30.8	59.8	28.1	55.5	34.3	63.8	33.1	61.9	34.8	65.2	35.1	63.6	35.5	.....	.....	64.2	37.5	58.8	35.8

TABLE 3.—*Maximum and minimum temperatures at selected stations for April, 1912. District No. 6*—Continued.

Date.	South Dakota.						Colorado.				Nebraska.															
	Sioux Falls §§.		Watertown §§.		Yankton.		Denver.		Wray.		Alma.		Bridgeport.		Grand Island.§§		Hay Springs.		Hebron.		Lincoln.		North Platte.		Oakdale.		Omaha.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	57	36	55	18	56	31	48	28	51	25	60	29	52	22	53	30	53	24	51	31	51	32	55	25	54	27	49	31
2	67	30	51	26	52	31	61	31	64	31	65	30	63	26	67	29	61	32	66	31	60	34	65	30	55	29	53	37
3	70	33	70	29	70	39	68	33	75	40	79	32	71	26	76	35	68	33	76	34	75	37	75	31	73	31	66	36
4	82	46	81	33	72	50	70	45	78	44	82	47	76	31	79	46	74	35	72	48	75	52	78	38	73	43	74	54
5	40	40	79	38	82	48	71	45	81	43	84	37	77	32	84	43	70	39	83	45	80	49	80	38	82	40	78	50
6	60	24	40	37	54	33	51	28	70	45	70	42	55	32	53	40	61	30	57	43	66	37	50	30	48	32	66	38
7	75	37	57	20	59	29	70	27	67	21	65	25	71	23	62	29	68	21	60	29	59	30	67	25	59	22	56	34
8	74	36	81	24	74	44	59	36	65	34	72	36	74	29	73	38	75	28	69	38	69	42	73	34	72	38	68	42
9	75	36	67	32	68	42	70	31	72	30	72	36	74	28	73	41	72	37	73	43	73	49	70	37	70	43	72	50
10	78	38	77	33	70	41	64	43	75	39	76	36	73	38	72	49	73	35	71	49	69	49	72	38	71	36	67	48
11	78	38	74	33	74	50	68	35	75	31	77	41	69	31	75	44	66	33	79	51	77	54	72	34	75	45	74	52
12	65	42	76	42	74	46	60	35	74	40	84	50	70	42	80	51	70	42	82	52	78	56	77	46	76	42	75	60
13	50	40	56	45	64	48	48	35	64	36	60	45	47	31	61	52	50	30	69	56	69	55	59	36	62	44	69	57
14	49	33	49	41	52	40	56	38	51	35	58	47	42	29	68	41	35	28	63	44	60	45	50	34	51	40	59	47
15	45	29	55	32	40	35	54	29	55	30	57	35	57	30	55	34	42	26	57	40	53	41	52	31	44	35	50	40
16	50	28	35	28	36	33	53	36	59	25	55	27	57	28	40	31	52	24	43	31	41	35	55	24	37	25	40	34
17	61	30	48	26	46	34	48	32	57	31	42	27	56	30	40	30	48	31	44	32	42	35	50	25	42	30	42	36
18	62	32	53	28	56	32	37	30	47	29	58	23	49	31	57	26	50	32	60	27	57	31	48	22	55	26	56	35
19	58	32	58	30	59	39	39	29	58	30	54	42	52	25	57	41	55	25	57	43	56	44	57	33	63	35	57	44
20	43	38	59	32	55	37	49	32	51	39	50	42	49	33	60	39	45	32	47	38	57	38	44	38	52	39	55	42
21	57	30	47	34	45	37	39	31	41	30	50	39	43	33	44	42	39	27	48	39	54	44	43	31	44	36	53	44
22	69	34	58	27	58	32	53	23	60	28	60	31	58	26	62	32	49	25	59	34	59	35	57	28	60	28	58	38
23	72	36	68	29	70	41	60	35	65	34	68	41	62	28	70	40	60	30	63	40	67	41	66	37	70	36	67	44
24	68	41	69	30	72	40	63	37	74	34	71	34	68	28	74	38	67	33	73	38	74	45	70	33	75	33	74	46
25	54	46	64	35	66	50	60	41	72	50	81	46	65	38	66	54	64	30	64	53	63	55	71	46	67	51	65	55
26	55	30	47	45	56	41	57	37	65	39	67	47	62	36	66	48	55	35	67	49	63	48	63	44	61	39	62	50
27	61	33	51	27	53	35	59	38	62	39	70	42	64	37	63	42	58	35	60	40	64	39	55	38	57	30	63	42
28	63	34	59	29	56	44	59	41	63	42	60	42	62	36	52	45	57	34	50	47	54	44	60	41	56	45	56	43
29	62	38	61	35	60	36	73	38	64	32	62	36	66	34	62	42	65	32	60	44	61	45	60	35	64	36	62	45
30	62	45	57	36	58	48	73	44	68	39	72	48	68	40	60	46	70	42	67	46	62	47	65	47	60	45	61	48
Mns.	62.1	35.5	60.1	31.8	60.2	39.5	58.0	34.8	64.1	34.8	66.0	37.8	61.7	31.1	63.5	39.9	59.1	31.3	63.0	41.8	62.9	42.9	62.0	34.3	60.9	36.0	61.6	44.1

Date.	Valentine, Nebr.		Iowa.						Kansas.										Missouri.							
			Clarinda.§§		Sibley.§§		Sioux City.		Colby.		Concordia.		Salina.		Topeka.		Wakeeney.		Columbia.		Kansas City.		St. Louis.		Unionville.§§	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	55	26	51	32	54	25	56	30	43	28	47	34	45	36	45	35	47	29	50	40	44	36	60	41	43	34
2	64	30	57	32	49	31	52	34	64	32	67	33	78	36	63	36	66	32	57	38	62	40	54	34	52	32
3	73	35	66	32	61	30	64	35	78	36	77	40	65	31	76	40	78	37	65	37	73	40	60	38	60	28
4	77	42	73	32	70	44	73	49	79	43	74	51	72	49	71	50	81	47	74	53	70	54	74	48	70	34
5	78	39	80	47	78	42	77	46	83	44	87	48	82	50	80	54	84	43	80	57	76	55	78	59	72	48
6	44	34	61	48	43	42	65	35	76	42	67	41	58	56	68	43	75	42	72	46	69	44	70	51	68	50
7	67	26	57	30	52	25	55	29	66	24	60	32	68	42	58	34	62	28	55	37	57	37	53	39	54	32
8	79	40	67	35	69	34	70	43	68	33	68	42	69	31	67	39	68	32	66	36	65	44	63	43	63	34
9	68	40	74	36	66	35	66	44	71	33	74	46	74	48	73	49	72	36	67	43	69	51	70	47	68	40
10	74	41	69	44	73	35	65	45	79	35	69	55	70	50	57	51	70	38	68	47	65	49	70	52	70	44
11	70	42	76	49	72	38	73	49	76	36	78	52	75	55	75	54	78	41	77	52	68	53	77	56	68	50
12	75	48	75	52	75	40	74	50	78	48	81	58	84	54	80	59	81	51	76	59	78	59	72	58	66	46
13	61	40	74	54	61	41	65	53	74	34	68	53	72	54	71	60	68	39	74	55	76	58	71	58	68	50
14	42	33	67	47	51	41	54	43	55	39	65	48	68	52	69	51	58	42	74	55	71	53	80	57	70	46
15	45	32	58	43	39	34	45	37	68	30	57	39	62	36	57	42	57	33	65	49	60	43	70	58	58	42
16	46	26	46	36	35	29	37	32	60	26	48	34	48	34	43	38	55	28	49	42	44	38	58	47	46	35
17	43	25	43	34	44	29	43	34	55	31	44	34	58	31	44	35	50	24	44	34	43	35	48	35	44	34
18	53	21	60	33	53	30	55	33	52	22	58	29	68	46	58	37	53	20	55	34	57	38	53	35	56	32
19	58	37	65	33	60	31	57	41	54	34	59	45	64	45	57	46	57	39	53	39	54	44	57	42	57	30
20	45	33	68	34	61	30	57	42	57	41	62	40	64	47	70	48	67	37	70	46	70	46	67	47	62	34
21	45	30	57	42	44	31	51	40	45	36	50	42	60	46	62	45	57	37	73	50	66	46	74	55	68	40
22	54	24	58	37	56	31	57	32	68	47	61	37	65	36	62	42	60	32	58	43	60	44	60	44	60	36
23	65	32	65	32	70	32	70	43	73	34	60	41	66	40	64	41	66	44	68	38	66	46	69	46	66	40
24	72	34	75	35	70	34	72	41	77	49	74	41	75	34	75	43	73	40	75	44	73	49	75	54	72	42
25	73	48	63	37	70	37	67	50	.....	.....	69	54	68	55	63	53	82	52	65	55	63	54	68	53	67	50
26	58	42	66	45	55	48	58	43	67	40	69	50	76	51	72	53	66	44	72	54	72	55	76	54	66	53
27	55	37	64	37	55	28	59	35	65	43	66	43	72	47	68	45	67	45	67	47	66	46	65	51	65	36
28	60	38	53	40	53	29	52	44	57	41	54	46	61	50	62	48	51	45	66	51	64	51	70	53	51	40
29	64	33	63	42	64	34	60	37	63	34	57	46	58	45	61	47	56	40	57	45	56	45	61	45	60	42
30	78	49	65	45	62	36	59	47	65	47	73	47	78	46	73	45	78	47	67	42	68	44	62	46	65	36
Mns.	61.4	35.0	63.9	39.2	58.8	34.2	60.3	40.5	66.1[a]	36.6[a]	64.8	43.4	67.4	44.4	64.8	45.4	66.3	38.1	65.3	45.6	64.2	46.6	66.1	48.2	61.8	39.7

[a], [b], *, etc., indicate respectively 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 7, LOWER MISSISSIPPI VALLEY.

ISAAC M. CLINE, District Editor.

GENERAL SUMMARY.

Low temperatures prevailed during the first 5 days, a minimum reading of 39° being recorded on the 3d as far south as Lake Charles, La. During the remainder of the month temperature conditions were moderate. Precipitation was well distributed, showers occurring in all parts of the district every day, except that from the 2d to 5th and on the 29th and 30th many stations received no rain. Weather conditions were generally favorable, except that in some localities in the eastern portion excessive rains interfered materially with outdoor occupations. Severe local storms occurred in parts of Oklahoma, Kansas, and Tennessee, and considerable damage resulted. Large areas in the immediate Mississippi Valley were under water at the close of the month as the result of breaking of levees in Arkansas, Mississippi, and Louisiana.

The following table summarizes the chief features of meteorological interest in the various portions of the district:

States and portions of States lying within District No. 7.	Mean temperature.	Departure from normal.	Mean precipitation.	Departure from normal.	Greatest precipitation in 24 hours.	Mean snowfall.	Number of days—				Prevailing wind direction.
							With 0.01 inch or more.	Clear.	Partly cloudy.	Cloudy.	
Colorado	41.5	—2.9	1.55	—0.56	4.58	14.2	6	13	10	7	w.
New Mexico	47.7	—4.1	1.20	+0.02	1.56	2.8	5	14	12	4	sw.
Texas	58.1	0.0	2.70	—0.22	6.39	0.5	5	14	7	9	s.
Kansas	55.3	—0.8	3.37	+0.74	4.02	0.4	7	14	9	7	s.
Oklahoma	59.8	—0.1	4.24	+1.65	8.30	2.8	8	15	8	7	s.
Missouri	57.8	+1.3	7.99	+3.59	4.50	0.4	12	12	8	10	s.
Tennessee	61.6	+2.0	10.10	+5.41	5.35	0	12	11	5	14	s.
Arkansas	61.9	+0.8	8.14	+3.59	4.71	T.	12	9	11	10	s.
Mississippi	65.1	+1.2	9.41	+5.16	5.28	0	12	11	8	11	se.
Louisiana	68.4	+1.2	7.04	+2.19	7.50	0	10	9	7	14	s.

TEMPERATURE.

Mean temperatures were below the normal to the west of the ninety-seventh meridian, and above in nearly all localities to the east of that line. The departures, however, were generally small, the greatest deficiency being 2.8°, in northeastern New Mexico, and the greatest excess 3.5°, in northwestern Tennessee. The highest temperature recorded was 99°, at Henrietta, Tex., and the lowest was 5°, at Lake Moraine, Colo., and Elizabethtown, N. Mex.

PRECIPITATION BY DRAINAGE AREAS.

Arkansas River and tributaries.—More than the normal amount of precipitation occurred over this drainage area, except that there was a deficiency at most stations to the west of the ninety-eighth meridian. In Colorado, the average from 35 stations was 1.53 inches, about 0.6 inch below the normal. Over those portions of the Arkansas Valley proper that lie in Kansas and Oklahoma, the average from 47 stations was 3.90 inches, about 1 inch above the normal. Over the headwaters of the Canadian River in New Mexico the average from 41 stations was 1.19 inches, about 0.2 inch above the normal, while over those portions of the Canadian Valley that lie in Texas and Oklahoma the average from 31 stations was 2.97 inches, about the normal amount. In the Cimarron Valley the average from 23 stations was 3.49 inches, about 1.7 inches above the normal. In the Verdigris Valley the average from 10 stations was 5.80 inches, about 2.8 inches above the normal. The amounts from 18 stations in the Neosho Valley averaged 5.13 inches, about 1.8 inches above the normal. Below the Oklahoma-Arkansas line the average from 16 stations was 8.11 inches, about 3.5 inches above the normal.

Red River and tributaries.—The precipitation was unevenly distributed over that portion of the Red River Valley that lies in New Mexico, Texas, and Oklahoma, where the amounts from 39 stations averaged 2.98 inches, about 0.4 inch above the normal. Below the Texas-Arkansas line the average from 19 stations was 7.98 inches, about 3.6 inches above the normal.

Mississippi River, south of St. Louis, and small tributaries.—Unusually heavy precipitation occurred generally over this drainage area. In the immediate Mississippi Valley the amounts from 40 stations averaged 9.21 inches, about 4.3 inches above the normal. The average from 23 stations in the valley of the White was 7.38 inches, about 3.4 inches above the normal. Over the Yazoo Valley the average from 25 stations was 9.77 inches, about 6.5 inches above the normal. The average from the valley of the Big Black was 9.43 inches, about 5.3 inches above the normal. In the Ouachita Valley the average from 19 stations was 7.98 inches, about 3.6 inches above the normal.

Louisiana coastal plain.—The precipitation was generally heavy over this drainage area, the average from 33 stations being 6.22 inches, about 2.4 inches above the normal.

SNOWFALL.

Snow occurred quite generally to the west of the ninety-ninth meridian and at some stations in northwestern Arkansas and in the Missouri area. The amounts ranged from a trace on the plains to 73 inches in the mountains of Colorado. In Colorado conditions have been unfavorable for melting the snow, except at low altitudes, and at the close of the month the average depth on the ground at a mean elevation of 9,500 feet was 15 inches, being greater than usual so late in the season. In New Mexico the snowfall was unusually heavy, and the prospects for a good flow of water for irrigation are somewhat better than at the close of March.

RIVERS.

No high water occurred in the upper reaches of the Arkansas River, but in Oklahoma and Kansas flood stages

occurred in some of the tributaries. The Neosho River was at flood stage April 29 and 30 from Oswego southward, causing damage to crops and enforced suspension of business. The loss is estimated at $40,000. A moderate flood was in progress in the lower reaches of the Arkansas at the close of the month, but no material damage resulted.

Floods occurred in the upper White River April 2 to 7 and in the lower White River April 6 to 30. Another flood occurred in the upper White River April 27 to 30. The preparation for crops was materially retarded, but no other damage was reported.

A flood of considerable extent was in progress in the lower Ouachita at the close of the month, and the Yazoo also was above the flood stage the greater part of the month.

The Red River was above the flood stage at Fulton, Ark., from April 3 to 10, inclusive.

The greatest flood in the history of the lower Mississippi River was in progress at the close of the month, with a great volume of the flood waters spread out over the lowlands of Louisiana and Mississippi north of Vicksburg, resulting from the breaking of levees above that place on both sides of the river. The highest stages (in feet) recorded during the month were as follows: Memphis, 44.9 on the 6th; Helena, Ark., 54.3 on the 21st and 22d; Arkansas City, 55.4 on the 12th; Vicksburg, 51.9 on the 13th; Natchez, 51.4 on the 14th; Baton Rouge, 41.5 on the 30th; Donaldsonville, 32.9 on the 30th; and New Orleans, 20.4 on the 30th. These stages are the highest ever recorded, except at Vicksburg, where the bulk of the water passed around that place over the Louisiana bottoms to the Red River.

The complete report of this flood will appear in a special bulletin to be issued later by the Weather Bureau.

TORNADOES.

Tornadoes in Oklahoma, April 20, 1912.—Tornadoes were reported from several localities in north-central Oklahoma during the afternoon of April 20, 1912. When the time of occurrence, location, and direction of movement are considered it appears that there were three independent storms. About 4 p. m. a funnel-shaped cloud was observed about 3 miles west of Yukon, Oklahoma County, moving from the southwest toward the northeast. The path of greatest destruction was 200 yards to one-fourth mile in width. The trees in its track were prostrated in every direction. Two houses, valued at $7,000, were destroyed. Two persons were injured; one is not expected to recover

At 3.30 p. m. a funnel-shaped cloud was observed 1 mile north of Arcadia, Oklahoma County, moving from the southwest toward the northeast. The path of greatest destruction was about 100 feet wide. Trees were prostrated in every direction. Damage to property and live stock is estimated at $525. This tornado reappeared about 1 mile northeast of Fallis, Lincoln County, at 6.15 p. m. and was moving toward the northeast. The width of the path of greatest destruction was 150 to 200 yards. Four houses and outbuildings were destroyed, the value of which is estimated at $5,000.

Another tornado made its appearance 5 miles northwest of Orlando, Payne County, about 4 p. m. The storm moved from the southwest toward the northeast. There was a funnel-shaped cloud. The path of greatest destruction was 1 mile in width, and the damage to property was estimated at $9,000 to $12,000. This tornado reappeared about 7 miles southeast of Perry, Noble County, and moved northeastward over a distance of 15 miles, disappearing in the Orto pastures. The path of greatest destruction was one-fourth to one-half mile in width. Three persons were killed and 12 seriously injured. About $40,000 worth of property was destroyed.

Another tornado made its appearance at Hennessey, Kingfisher County, at 4.30 p. m. The storm had a funnel-shaped cloud and moved from the southwest toward the northeast. The path of greatest destruction was about 2 miles in width. Six persons were injured, and the damage amounted to about $75,000.

Tornadoes in Oklahoma, April 27, 1912.—During the afternoon and evening of April 27, 1912, six distinct tornadoes occurred in southwestern Oklahoma and one in the southeastern portion of the State.

The first storm made its appearance near Childress, Tex., about 10.30 a. m., moving from southwest to northeast, and the funnel shaped cloud was well defined. The path of destruction was about one-half mile wide, and the damage was conservatively estimated at $65,000. Five persons were killed and 20 injured. This storm was again observed at Eldorado, Jackson County, Okla., at 11.30 a. m. The funnel cloud was not seen here, but the disposition of the débris clearly indicated a rotary movement of the winds. The path was about 500 yards wide. Seven residences, with barns, etc., were destroyed, the damage being estimated at $12,000. Three persons were injured, but none was killed. This storm again manifested destructive violence at Martha, Jackson County, Okla., about 2.30 p. m. When first observed from Martha, it was about 5 miles southeast of the town, and it moved in a northeasterly direction, passing about 2¼ miles east of the town. The path of greatest destruction was 200 to 300 yards in width. Its energy decreased and its destructive violence was last exhibited about one-half mile west of Blair, Kiowa County, where the funnel-shaped cloud disappeared. The damage at Martha is estimated at $16,000 and at Blair $3,000. No persons were killed or injured at either place.

The second storm exhibited destructive violence over the longest stretch of territory of any of the tornadoes, its path extending from Lugert, in the extreme southwestern portion of Kiowa County, northeastward to Calumet, in the northern portion of Canadian County. This storm first appeared at Lugert about 12.30 p. m., traveling in a northeasterly direction, with a path about one-half mile wide, and having a well-defined funnel-shaped cloud. Two persons were killed in the vicinity of Lugert, and the property damage is estimated at $50,000. This storm made its second appearance at Hobart, Kiowa County, about 1 p. m. The funnel cloud was well defined and the path of destruction was from 100 yards to one-half mile in width. Five persons were killed and 25 injured in Kiowa County. The property damage is estimated at $250,000. This storm reappeared at Colony, Washita County, at 2 p. m., still moving in a northeasterly direction, the path of destruction varying from one-fourth to one-half mile in width. Four persons were killed and 6 injured, and the property damage is estimated at $5,000. The storm was accompanied by a torrential rainfall at this place. This storm was next observed at Hinton, Caddo County, about 2.30 p. m., moving in the same general direction, with the destructive path about one-half mile wide. The funnel-shaped cloud was not seen at this place, but the observers are not certain that it did not exist, as the darkness and heavy rain preceding the wind rendered it impossible to observe closely. A rotary motion of the winds, however, is clearly shown by the distribution of the débris along the path. One person was killed at Hinton and 4 were injured. The property damage at this place

was about $25,000. This storm last exhibited destructive violence at Calumet, Canadian County, where it appeared about 3.14 p. m. At this place the path was about one-half mile wide and the funnel was well defined. Three persons were killed and 4 injured. The damage is conservatively estimated at $100,000. After passing Calumet this storm apparently died out. The third storm was observed first at Rocky, Washita County, at 2 p. m. The storm traveled in a northeasterly direction with a well-defined funnel cloud, and the path of destruction was about one-half mile wide. About 50 houses were destroyed in the town and some stock was killed in the country. Two persons were injured but none was killed.

The fourth storm occurred at Elk City, Custer County, about 5.07 p. m. There were five funnel-shaped clouds, and the combined width of the paths was from 1 to 2 miles. Thirty-five buildings, 13 head of live stock, and many farm implements were destroyed. Two persons were killed and 7 injured in this locality.

The fifth storm appeared at Butler, Choctaw County, about 6.30 p. m., and moved in the anomalous direction from southeast to northwest. The funnel cloud was well defined and the path of destruction about 500 feet wide. One person was killed and 3 were injured. The property damage is estimated at $50,000 in that city and vicinity.

The sixth tornado made its appearance in the vicinity of Hobart, Kiowa County, about 8.30 p. m., reached Sentinel, Washita County, about 9 p. m., and here exhibited two funnel clouds.

The seventh tornado occurred in the vicinity of Sentinel about 1.30 a. m. of the 28th. The path was not well defined, the funnel cloud apparently dipping down and destroying a building and then lifting over several and again descending. About 60 houses were blown down, and 2 persons were killed and 2 injured. It is impossible to estimate the loss in money terms, but it was great.

Tornadoes in Kansas, April 20, 1912.—Tornadoes occurred in south-central Kansas April 20, 1912. There were three storms. The first appeared at Bison, Rush County, at 3 p. m., moving from the south-southwest to north-northeast, and there was a funnel-shaped cloud. The path of greatest destruction was about 80 yards wide. Two persons were killed and about 15 injured. The damage to property amounted to about $70,000. The second tornado made its appearance near Nashville, Kingman County, about 3.30 p. m., moving from the southwest toward the northeast and passed near Willowdale, Kingman County, about 4 p. m. The funnel-shaped cloud was visible at both places. In the vicinity of Nashville the path of greatest destruction was 250 yards wide. Two persons were injured, a few head of live stock were killed, and about 10 houses and barns were blown down. In the vicinity of Willowdale the path of greatest destruction was about 150 feet wide. Two persons were injured, and buildings worth $8,000 were destroyed. The third tornado appeared 3 miles west of Waldron, Harper County, at 4 p. m., moving from the south toward the north. The path of greatest destruction was about one-fourth mile wide. One person was killed and 8 were injured. The damage to buildings and the loss of live stock amounted to about $10,000.

CITY AND SUBURBAN TEMPERATURES.

By EDWARD D. COBERLY, Local Forecaster.

Much has been written on this subject during the last few years, and some investigators have gone so far as to assert that only temperatures reduced to what they would be if taken in the open country should be used in the construction of general isothermal charts. There can be no doubt that in the cities, where instruments are exposed on the tops of large office buildings, the temperature records are more or less affected, particularly so when the atmosphere is sluggish and winds light. The large brick and steel buildings undoubtedly absorb great quantities of heat during the day in the bright sunshine and radiate the same at night. In winter the innumerable fires must give off an appreciable amount of heat, the effects of which are shown in our temperature records. The large quantities of dust and smoke particles in the atmosphere of our cities also exercise a great influence on radiation. Moreover, as these records are usually made at heights varying from 75 to 300 feet above the ground, the nocturnal cooling of the air near the surface of the earth is not shown by them.

A brief summary of some of the results of other investigations in this field seems to be pertinent in this connection, and the following short quotations from Hann's Climatology (Ward), pages 29–30, are given:

> As a general rule, it is found that the mean annual temperature of the air in places where there are many buildings is from 0.9° to 1.8° too high. The differences are greatest in the morning and evening and least at noon. The diurnal range of temperature is smaller in cities, especially in summer.
>
> The mean temperature which is usually given for Paris is 1.4° too high; and this is likewise true for Brussels, London, and other cities. The mean temperature of the city of Vienna is 49.5°, that of the surrounding country 48.6°. Hellman also took into consideration the differences in the exposure of the thermometers, and found that Berlin is 0.5° warmer than the surrounding country in winter; 1.1° warmer in spring and summer; and 0.7° warmer in autumn. The evening temperatures in Berlin, however, are 2.2° higher in spring and summer, and 1.4° higher in the mean annual.
>
> In the case of Paris there was found to be a difference of +4.2° on summer nights; the temperatures are the same at noon, and the difference is +2° in the diurnal and the annual means. The city is warmer than the country by these amounts. The mean mimima are much higher in the cities, while the mean maxima may be the same as those of the country, or sometimes even lower. The cooling by radiation at night is much greater in the open than in places which are built up. Mendenhall states that during the cold waves of January, 1884, the mean minimum temperatures registered at the regular Weather Bureau stations in Toledo, Cleveland, Columbus, and Cincinnati, Ohio, were from 3.1° to 14.9° higher than those recorded at cooperative stations outside the large cities.

Prof. J. Warren Smith finds that the mean maximum temperature for the year is 0.3° higher and the mean minimum 3.3° lower at Ohio State University (a country exposure) than at the regular Weather Bureau office in the heart of the city at Columbus, Ohio. He states that the minimum temperatures are considerably lower at the university than in the city.

At New Orleans records have been kept for the last 23 years at the Louisiana Sugar Experiment Station in Audubon Park, and we shall compare these records with those of the regular Weather Bureau station in this city covering a simultaneous period. During this time all records at the regular Weather Bureau station have been made on the roof of the customhouse, about one-fourth mile from the Mississippi River and 90 feet above the street level; this station will be designated "New Orleans No. 1" in our discussion. "New Orleans No. 2," or Audubon Park, is 6 miles west of the regular Weather Bureau office and about 800 feet from the Mississippi River. The instruments are exposed in a standard shelter, 6 feet over sod, and the location is ideal, being removed from buildings and paved streets, so that the exposure may be taken as almost perfect.

It is found that the mean annual temperature is 0.6° higher at the customhouse than at the park. The monthly mean temperature is higher at station No. 1 every month, except June and July, when the excess of the mean at the park is 0.2° and 0.3°, respectively.

The greatest excess in the monthly mean at the customhouse station, 1.5°, occurs in October. The mean maximum temperature at the park is higher in every month of the year, the excess ranging from 0.2° in November to 2.1° in June and 2.0° in July, and the annual mean maximum is 1.3° higher at the park than at the regular Weather Bureau station. Just the reverse of the case just stated is found for the minimum temperatures, those at the park being lower, and the difference between the two stations is about twice as great as in the case of the maximum temperatures. The annual mean minimum at the park is 2.6° lower than at the customhouse. The difference is least in midsummer and greatest in the autumn months, October and November, being 4.2° and 3.6°, respectively. It is the opinion of the writer that this is largely due to the generally light wind movement during the nocturnal hours at this season of the year, thus allowing the air to lie quietly over the grassy stretch of the park and cool rapidly by conduction to the cold ground which has radiated its heat much faster than the buildings in the heart of the city. This is very clearly shown by the light fog which hangs over the park at the time of lowest temperature, about sunrise nearly every morning, during the autumn months, while none is visible over paved streets less than half a mile away. It will also be noted that the maximum temperatures are usually 1° to 3° higher and the minimum readings 1° to 6° lower in the open exposure than on the top of the buildings. This difference in the case of minimum temperatures is very important in its bearing on the formation of frosts, and the occurrence of frost temperatures. If conditions are favorable for the occurrence of frost or frost temperature—that is, clear skies and light winds with the necessary fall in temperature—this inevitable difference between the temperature in the city and country should always be borne strictly in mind, as in critical times the difference of even a few degrees may mean the saving or losing of an entire crop.

These differences in minimum temperatures, especially, are much accentuated when the distance between country and city stations is increased somewhat and the country station is entirely removed from the city. After all, these differences are dependent solely on the causes which control nocturnal terrestrial radiation. Some striking examples have come to notice. Dr. I. M. Cline says:

> The temperature varies greatly in different localities in adjacent neighborhoods. The temperature at regular Weather Bureau stations is often very different from that which prevails in the neighboring agricultural communities. In this connection, Mr. H. Meyer, under date of Bertrandville, La., November 23, 1901, says: "There is considerable trucking done here in the early spring, and I hope you will give us warning when a cold wave comes along. What I can not understand is that the 16th of this month your record at New Orleans was 44° while at this place, 25 miles farther south, we had 32°. Ice formed as thick as window glass."

A comparison of the minimum temperatures recorded at the United States Weather Bureau office, St. Louis, Mo., with those recorded at the Forest Park Observatory shows that the mean monthly minimum at Forest Park was 1.5° to 9° below the mean monthly minimum at the Weather Bureau station. In the discussion of this matter the writers say:

> In the study of these observations it was found that during the clear skies of September the maximum differences were recorded, while during the cloudiest months (March and December) the differences were least, and that they remained small during all of the winter months. There were, however, marked exceptions to this rule, as, for instance, in January, 1892, when the difference exceeded 20° on three successive dates.

There also seems to be a marked control over radiation exercised by the color of the soil and whether or not the same be covered by vegetation. Differences of 10° or more, have been observed on adjacent plats of ground due to this cause.

A condensed table showing temperature conditions at the regular Weather Bureau station, New Orleans, La., and at the sugar experiment station, Audubon Park, this city, is appended.

A short bibliography of works which have been consulted in the preparation of this paper, which may be of service to those who desire to go more thoroughly into this subject of city and country temperatures and the control of nocturnal radiation by local causes, is given below.

Months.	Mean temperature No. 1.	Mean temperature No. 2.	Algebraic excess of No. 1.	Mean maximum temperature No. 1	Mean maximum temperature No. 2.	Algebraic excess of No. 1.	Mean minimum temperature No. 1.
January	54.7	53.5	+1.2	62.3	63.0	−0.7	46.6
February	56.0	55.3	+0.7	62.8	63.8	−1.0	47.2
March	63.7	62.9	+0.8	72.5	73.5	−1.0	56.5
April	69.0	68.4	+0.6	76.8	78.7	−1.9	60.9
May	75.2	75.0	+0.2	83.4	85.3	−1.9	67.7
June	80.5	80.7	−0.2	88.2	90.3	−2.1	73.2
July	81.9	82.3	−0.4	88.9	90.9	−2.0	74.9
August	82.2	81.9	+0.3	89.6	90.7	−1.1	75.4
September	79.3	78.4	+0.9	86.6	87.4	−0.8	72.9
October	70.5	69.0	+1.5	77.9	79.0	−1.1	63.4
November	62.0	60.7	+1.3	70.5	70.7	−0.2	54.5
December	55.3	54.6	+0.7	62.5	63.7	−1.2	47.1
Year	69.2	68.6	+0.6	76.8	78.1	−1.3	61.7

Months.	Mean minimum temperature No. 2.	Algebraic excess of No. 1.	Monthly maximum No. 1.	Monthly maximum No. 2.	Algebraic excess of No. 1.	Monthly minimum No. 1.	Monthly minimum No. 2.	Algebraic excess of No. 1.
January	43.8	+2.8	81	83	−2	22	21	+1
February	44.8	+2.4	82	84	−2	7	6	+1
March	54.1	+2.4	86	89	−3	31	30	+1
April	58.6	+2.3	89	90	−1	41	40	+1
May	64.2	+3.5	96	99	−3	52	46	+6
June	71.5	+1.7	98	100	−2	60	58	+2
July	73.5	+1.4	102	101	+1	63	65	−2
August	73.9	+1.5	100	100	0	68	65	+3
September	70.1	+2.8	96	98	−2	55	52	+3
October	59.2	+4.2	94	96	−2	40	35	+5
November	50.9	+3.6	89	90	−1	29	28	+1
December	44.2	+2.9	83	82	+1	21	19	+2
Year	59.1	+2.6	102	102	0	7	6	+1

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TABLE 1.—*Climatological data for April, 1912. District No. 7, Lower Mississippi Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Colorado.																				
Buena Vista	Chaffee	7,955	12	34.8	— 5.3	61	29	8	1	38	0.30	— 0.44	0.15	4.0	2	20	1	9	nw.	C. A. Short.
Calhan	El Paso	6,700	5																	H. B. Rice.
Canon City	Fremont	5,343	24	45.8	— 5.5	81	30	26	1	42	1.19	— 0.33	0.62	1.0	6	19	10	1	ne.	U. S. Weather Bureau.
Colorado Springs	El Paso	6,098	32	42.8	— 2.2	68	30	20	7	37	1.56	— 0.02	0.70	7.3	10	9	15	6	.....	Colorado College.
Cripple Creek	Teller	1,396	11								1.19	— 0.10	0.47	22.0	9					F. G. Willis.
Cuchara Camps	Huerfano	8,200	3								4.58	.....	1.36	44.1	10	11	16	3	sw.	G. A. Mayes.
Eads	Kiowa	4,209	5	50.4	.....	80	4†	23	7	47	T.	.....	T.	T.	0	13	16	1	se.	Mrs. Mattie A. Kerr.
Fairview	Custer	9,500	3								3.72	.....	1.75	53.1	6	4	22	4	.....	Elizabeth L. Gray.
Fremont Exp. Sta	El Paso	8,850	2	32.7	.....	58	30	12	22	31	1.56	.....	0.90	15.1	8	12	8	10	nw.	U. S. Forest Service.
Garfield	Chaffee	9,510	2								1.00	.....	0.25	15.0	9	10	5	15	w.	Lloyd N. Felton.
Hamps	Elbert	5,400	19	43.5	— 1.9	77	30	14	19	45	1.13	— 0.94	0.65	8.2	5	16	6	8	n.	W. Hamp.
Hermit Lake	Custer	10,000	2								7.64	.....	0.92	73.0	14	4	12	14	sw.	John E. Graham.
Hoehne (near)	Las Animas	5,700	20	47.4	— 1.2	77	30	17	1	49	1.40	— 0.25	0.83	2.0	5	19	7	4	w.	S. W. De Busk.
Holly	Prowers	3,380	17	51.8	— 1.5	84	5	22	7	48	0.93	— 0.79	0.48	1.0	4	14	9	7	se.	Holly Sugar Co.
La Junta	Otero	4,052									0.58	.....	0.27	0.2	5	10	10	10	se.	R. B. Elliott.
Lake Moraine	El Paso	10,265	18	29.2	— 3.4	51	30	5	21	31	2.23	— 1.13	0.53	38.0	13	9	14	7	sw.	Clyde C. McReynolds.
Lamar	Prowers	3,562	22	52.4	— 1.4	85	30	25	7	42	1.15	— 0.75	0.75	12.5	2	23	5	2	s.	J. T. Lawless.
Las Animas	Bent	3,899	44																	F. M. Tague.
La Veta Pass	Costilla	9,000	2								1.47	.....	0.38	15.4	5	5	16	9	w.	Clara M. Wright.
Leadville	Lake	10,248	16	28.2	— 4.1	52	7.	7	22	41	0.62	— 0.98	0.19	9.1	12	8	16	6	w.	U. S. Weather Bureau.
Limon (near)	Elbert	5,360	5	43.5	.....	76	30	16	19	43	1.40	.....	0.60	8.0	5	13	12	5	s.	F. L. Palmer.
Madrid	Las Animas		2								1.37	.....	0.57	1.0	6					Thomas Sawers.
Manitou	El Paso																			John Faucher.
Marshall Pass	Saguache	10,846	9								1.33	.....	0.35	16.0	6	13	0	17	.....	W. L. Williams.
Monument	El Paso	7,200	1	38.2	.....	63	3†	13	7	41	1.17	.....	0.54	9.3	5	14	11	5	e.	U. S. Forest Service.
North Lake	Las Animas	8,700	20								3.05	+ 0.54	0.56	34.0	10	20	4	6	nw.	James W. Ingmire.
Oro	Lake																			Frank A. Aicher.
Pueblo	Pueblo	4,734	24	48.8	— 1.7	81	30	24	7	48	1.21	— 0.22	0.46	5.1	7	11	17	2	se.	U. S. Weather Bureau.
Rocky Ford (near)	Otero	4,177	23																	B. K. Blinn.
St. Elmo	Chaffee	9,500	3								0.68	.....	0.20	10.5	9	14	10	6	sw.	Daniel Clark.
Salida	do	7,035	13	39.8	— 4.3	68	29	11	1	42	0.40	— 1.40	0.24	1.7	3	24	4	2	w.	M. D. L. Buell.
Santa Clara	Huerfano	8,252	17	39.4	— 3.2	66	30	14	2	39	2.16	— 1.16	0.63	20.0	8	6	24	0	.....	Lincoln G. Morris.
Sheridan Lake	Kiowa	4,065	10																	Howard Gamble.
Stonewall	Las Animas	8,000	6								1.28	.....	0.44	6.4	5	10	7	13	w.	G. A. Story.
Trinidad	do	5,994	16	46.6	.....	74	30	22	1†	37	1.32	— 0.49	0.75	2.0	5	10	11	9	.....	Walter Dearden.
Two Buttes	Baca	4,100	1																	N. G. Jones.
Victor	Teller	10,100	8	33.2	.....	54	30	14	13	32	0.50	.....	0.30	9.0	2	23	6	1	w.	Fred Jones.
Vilas	Baca	3,935	21								2.30	+ 0.42	1.72	T.	3	17	6	7	sw.	Carrie Konkel.
Wayne	El Paso		1								1.10	.....	1.10	6.0	2	14	9	7	sw.	J. C. Groff.
Westcliffe	Custer	7,864	18	39.2	— 1.9	67	29	14	19	43a	1.48	— 0.24	0.65	20.0	6	7a	10a	12a	sw.	Zack Jordan.
Winfield	Chaffee	9,765	2								0.25	.....	0.06	4.2	9	4	16	10	w.	John G. Payne.
Woodman Sanatorium	El Paso		1	43.0	.....	70	30	20	7	38	1.27	.....	0.80	10.2	4	18	8	4	n.	Dr. J. E. White.
Wortman	Lake	11,250	11								1.25	— 2.05	0.30	27.5	9	4	13	13	nw.	George C. Wortman.
New Mexico.																				
Abbott	Mora	5,771	3			82	30				0.73	.....	0.32	4.0	4	15	10	5	s.	Agent E. P. & S. W. R. R.
Albert	Union	4,700	22	53.0	— 2.8	85	30	30	8	44	1.26	+ 0.10	0.48	0	4				w.	Andrew Knell.
Aurora	Colfax	8,849	3								1.15	.....	0.32	12.5	11	2	18	10	nw.	Miss J. Lucero.
Bell Ranch	San Miguel	4,500	13	52.8	.....	86	30	27	2	45	0.82	— 0.64	0.29	0	6	20	3	7	w.	C. M. O'Donel.
Black Lake	Colfax	8,348	3								0.39	.....	0.18	1.8	6	8	15	7	w.	Ralph T. Martinez.
Cabeza	San Miguel	5,406	3	49.6	.....	81	5	30	1†	40	2.34	.....	1.20	1.0	7	7	17	6	sw.	Agent E. P. & S. W. R. R.
Campana	do	4,493	3								0.95	.....	0.26	0	8	22	0	8	sw.	Do.
Chacon	Mora	9,000	3								1.36	.....	0.48	12.5	7	0	27	3	w.	Alfred Lucero.
Cimarron (near)	Colfax	6,385	8	44.8	.....	74	30	20	22	47	0.67	.....	0.58	0	4	10	14	6	s.	William French.
Clayton	Union	5,178	7																	Dr. W. W. Chilton.
Clovis	Curry	4,129	1																	J. H. Barry.
Cuervo	Guadalupe	4,849	3	53.1	.....	80	11	29	1	46	0.30	.....	0.30	.....	1	21	1	8	sw.	Agent E. P. & F. W. R. R.
Dawson	Colfax	6,396	3								1.30	.....	0.80	T.	2	5	21	4	se.	Do.
Elizabethtown	do	8,465	7	34.4	.....	64	30	5	1	44	0.48	.....	0.15	7.0	6	10	16	4	sw.	Miss M. Carrington.
Folsom	Union	6,399	12	44.6	— 2.7	76	30	19	7	40	2.04	— 0.57	0.87	9.5	7	18	7	5	sw.	David Rope.
Fort Union	Mora	6,835	52	40.8	— 6.9	73	30	15	23	45	0.67	— 0.22	0.16	2.0	6	19	7	4	w.	M. C. Needham.
Hayden	Union	4,444	2	50.8	.....	83	30	22	7	43	2.77	.....	1.23	1.0	7	11	18	1	sw.	James B. Dickson.
Hoosier Ranch	Mora		1								0.56	.....	0.23	2.0	5	17	12	1	sw.	W. H. Guthman.
Johnsons Park	Colfax	6,722	3								2.15	.....	0.95	.....	7	7	16	7	sw.	A. J. Meloche, jr.
Kappus	Quay	4,010	1								0.79	.....	0.30	.....	5					A. Kappus.
Lake Alice	Colfax	7,160	3								2.86	.....	1.30	8.0	5					John Bell.
Logan	Quay	3,851	6	54.0	.....	88	30	29	2	45	0.98	.....	0.50	0	3	23	6	1	sw.	John B. Reneau.
Lykins (near)	Roosevelt	5,000	2								0.90	.....	0.40	.....	3	20	7	3	sw.	J. G. Buchanan.
Maxwell (near)	Colfax	5,894	5								0.90	.....	0.46	.....	4					Dan N. Jackson.
Melrose	Curry	4,400	4								0.53	.....	0.27	0	3					Dr. B. M. Porter.
Miami Ranch	Colfax	6,000	4	45.0	.....	75	30	23	1†	44	0.76	.....	0.57	0	4	5	25	0	w.	Farmers' Development Co.
Mills (near)	Mora	5,985	1								1.06	.....	0.22	2.0	8	11	7	12	sw.	J. E. LaRue.
Montoya	Quay	4,335	3			83	30				0.45	.....	0.25	T.	2	15	2	13	w.	Agent E. P. & S. W. R. R.
Mount Dora (near)	Union	5,600	1	47.2	.....	80	30	17	2	41	2.20	.....	1.20	6.0	5	5	19	6	sw.	Edward F. Grygla.
Nara Visa	Quay	4,225	6	53.0	.....	80	26†	29	2	42	1.31	.....	0.48	0	7	18	7	5	sw.	George Bringle.
Palo Verde	Mora	5,880	1								0.78	.....	0.34	2.5	7	2	27	1	sw.	G. R. Abernathy.
Pasamonte	Union		3								1.58	.....	0.52	2.0	5	16	10	4	w.	J. J. Heringa.
Pleasant View	Mora		1								1.34	.....	0.27	3.0	8	16	13	1	sw.	R. W. Boulware.
Portales	Roosevelt	4,004	2																	Portales Irrigation Co.
Raton	Colfax	6,660	14	43.0	— 5.4	70	10	18	2	41	2.63	+ 1.42	1.20	14.5	5	17	9	4	w.	Humphrey & Wiseman.
Rociada	San Miguel	8,200	8	43.4	.....	70	30	18	2	41	0.64	.....	0.20	6.5	4	11	17	2	w.	J. E. Dailey.
Rosebud	Union	4,500	1								3.29	.....	1.56	0	5					H. A. Nachtrieb.
Roy	Mora	5,884	3								0.98	.....	0.45	2.0	5	9	19	2	sw.	Agent E. P. & S. W. R. R.
Roy (near)	do	5,880	1								0.64	.....	0.36	2.0	3	16	14	0	sw.	Baum Bros.
San Jon	Quay	4,200	5	53.2	.....	88	30	25	2	44	1.03	.....	0.32	T.	6	20	4	6	sw.	Jesse T. White.
Solano	Mora	5,622	3	47.8	.....	70	4†	24	21	39	0.90	.....	0.32	2.5	6	21	6	3	sw.	F. M. Hughes.
Springer	Colfax	5,857	20	46.7	— 2.9	78	30	20	1	54	0.13	.....	0.10	0	1	24	6	0	w.	Agent A., T. & S. F. R. R.
Taylor	do	5,661	3			80	30	20	2†		0.56	.....	0.42	0.5	3	16	13	1	sw.	Agent E. P. & S. W. R. R.
Trementina	San Miguel	5,000	4								0.68	.....	0.25	0	7	11	6	13	.....	Miss Alice Blake.
Tucumcari	Quay	4,194	7	55.2	.....	87	30	30	2	40	1.01	.....	0.38	0	6	19	10	1	w.	John F. Seaman.
Valley	Union	5,000	7	52.0	.....	79	30	29	8†	43	1.00	.....	1.00	1.0	5	17	13	0	s.	Miss M. L. Payne.
Vance (near)	do		1								2.54	.....	1.02	2.0	8	13	11	6	sw.	C. E. Anderson.
Vermejo Park	Colfax	7,600	7	41.4	.....	72	27	14	2	50	0.70	.....	0.26	1.0	4	21	4	5	w.	H. W. Adams.
Wagon Mound (near)	Mora	6,300	3	43.6	.....	78	30	18	2	48	1.00	.....	0.40	2.0	8	15	9	6	sw.	Guy L. Barnes.

The greatest excess in the monthly mean at the customhouse station, 1.5°, occurs in October. The mean maximum temperature at the park is higher in every month of the year, the excess ranging from 0.2° in November to 2.1° in June and 2.0° in July, and the annual mean maximum is 1.3° higher at the park than at the regular Weather Bureau station. Just the reverse of the case just stated is found for the minimum temperatures, those at the park being lower, and the difference between the two stations is about twice as great as in the case of the maximum temperatures. The annual mean minimum at the park is 2.6° lower than at the customhouse. The difference is least in midsummer and greatest in the autumn months, October and November, being 4.2° and 3.6°, respectively. It is the opinion of the writer that this is largely due to the generally light wind movement during the nocturnal hours at this season of the year, thus allowing the air to lie quietly over the grassy stretch of the park and cool rapidly by conduction to the cold ground which has radiated its heat much faster than the buildings in the heart of the city. This is very clearly shown by the light fog which hangs over the park at the time of lowest temperature, about sunrise nearly every morning, during the autumn months, while none is visible over paved streets less than half a mile away. It will also be noted that the maximum temperatures are usually 1° to 3° higher and the minimum readings 1° to 6° lower in the open exposure than on the top of the buildings. This difference in the case of minimum temperatures is very important in its bearing on the formation of frosts, and the occurrence of frost temperatures. If conditions are favorable for the occurrence of frost or frost temperature—that is, clear skies and light winds with the necessary fall in temperature—this inevitable difference between the temperature in the city and country should always be borne strictly in mind, as in critical times the difference of even a few degrees may mean the saving or losing of an entire crop.

These differences in minimum temperatures, especially, are much accentuated when the distance between country and city stations is increased somewhat and the country station is entirely removed from the city. After all, these differences are dependent solely on the causes which control nocturnal terrestrial radiation. Some striking examples have come to notice. Dr. I. M. Cline says:

> The temperature varies greatly in different localities in adjacent neighborhoods. The temperature at regular Weather Bureau stations is often very different from that which prevails in the neighboring agricultural communities. In this connection, Mr. H. Meyer, under date of Bertrandville, La., November 23, 1901, says: "There is considerable trucking done here in the early spring, and I hope you will give us warning when a cold wave comes along. What I can not understand is that the 16th of this month your record at New Orleans was 44° while at this place, 25 miles farther south, we had 32°. Ice formed as thick as window glass."

A comparison of the minimum temperatures recorded at the United States Weather Bureau office, St. Louis, Mo., with those recorded at the Forest Park Observatory shows that the mean monthly minimum at Forest Park was 1.5° to 9° below the mean monthly minimum at the Weather Bureau station. In the discussion of this matter the writers say:

> In the study of these observations it was found that during the clear skies of September the maximum differences were recorded, while during the cloudiest months (March and December) the differences were least, and that they remained small during all of the winter months. There were, however, marked exceptions to this rule, as, for instance, in January, 1892, when the difference exceeded 20° on three successive dates.

There also seems to be a marked control over radiation exercised by the color of the soil and whether or not the same be covered by vegetation. Differences of 10° or more, have been observed on adjacent plats of ground due to this cause.

A condensed table showing temperature conditions at the regular Weather Bureau station, New Orleans, La., and at the sugar experiment station, Audubon Park, this city, is appended.

A short bibliography of works which have been consulted in the preparation of this paper, which may be of service to those who desire to go more thoroughly into this subject of city and country temperatures and the control of nocturnal radiation by local causes, is given below.

Months.	Mean temperature No. 1.	Mean temperature No. 2.	Algebraic excess of No. 1.	Mean maximum temperature No. 1	Mean maximum temperature No. 2.	Algebraic excess of No. 1.	Mean minimum temperature No. 1.
January	54.7	53.5	+1.2	62.3	63.0	−0.7	46.6
February	56.0	55.3	+0.7	62.8	63.8	−1.0	47.2
March	63.7	62.9	+0.8	72.5	73.5	−1.0	56.5
April	69.0	68.4	+0.6	76.8	78.7	−1.9	60.9
May	75.2	75.0	+0.2	83.4	85.3	−1.9	67.7
June	80.5	80.7	−0.2	88.2	90.3	−2.1	73.2
July	81.9	82.3	−0.4	88.9	90.9	−2.0	74.9
August	82.2	81.9	+0.3	89.6	90.7	−1.1	75.4
September	79.3	78.4	+0.9	86.6	87.4	−0.8	72.9
October	70.5	69.0	+1.5	77.9	79.0	−1.1	63.4
November	62.0	60.7	+1.3	70.5	70.7	−0.2	54.5
December	55.3	54.6	+0.7	62.5	63.7	−1.2	47.1
Year	69.2	68.6	+0.6	76.8	78.1	−1.3	61.7

Months.	Mean minimum temperature No. 2.	Algebraic excess of No. 1.	Monthly maximum No. 1.	Monthly maximum No. 2.	Algebraic excess of No. 1.	Monthly minimum No. 1.	Monthly minimum No. 2.	Algebraic excess of No. 1.
January	43.8	+2.8	81	83	−2	22	21	+1
February	44.8	+2.4	82	84	−2	7	6	+1
March	54.1	+2.4	86	89	−3	31	30	+1
April	58.6	+2.3	89	90	−1	41	40	+1
May	64.2	+3.5	96	99	−3	52	46	+6
June	71.5	+1.7	98	100	−2	60	58	+2
July	73.5	+1.4	102	101	+1	63	65	−2
August	73.9	+1.5	100	100	0	68	65	+3
September	70.1	+2.8	96	98	−2	55	52	+3
October	59.2	+4.2	94	96	−2	40	35	+5
November	50.9	+3.6	89	90	−1	29	28	+1
December	44.2	+2.9	83	82	+1	21	19	+2
Year	59.1	+2.6	102	102	0	7	6	+1

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TABLE 1.—*Climatological data for April, 1912. District No. 7, Lower Mississippi Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Colorado.																				
Buena Vista	Chaffee	7,955	12	34.8	− 5.3	61	29	8	1	38	0.30	− 0.44	0.15	4.0	2	20	1	9	nw.	C. A. Short.
Calhan	El Paso	6,700	5																	H. B. Rice.
Canon City	Fremont	5,343	24	45.8	− 5.5	81	30	26	1	42	1.19	− 0.33	0.62	1.0	6	19	10	1	ne.	U. S. Weather Bureau.
Colorado Springs	El Paso	6,098	32	42.8	− 2.2	68	30	20	7	37	1.56	− 0.02	0.70	7.3	10	9	15	6	.....	Colorado College.
Cripple Creek	Teller	1,396	11								1.19	− 0.10	0.47	22.0	9					F. G. Willis.
Cuchara Camps	Huerfano	8,200	3								4.58	.....	1.36	44.1	10	11	16	3	sw.	G. A. Mayes.
Eads	Kiowa	4,209	5	50.4	.....	80	4†	23	7	47	T.	.....	T.	T.	0	13	16	1	se.	Mrs. Mattie A. Kerr.
Fairview	Custer	9,500	3								3.72	.....	1.75	53.1	6	4	22	4	.....	Elizabeth L. Gray.
Fremont Exp. Sta	El Paso	8,850	2	32.7	.....	58	30	12	22	31	1.56	.....	0.90	15.1	8	12	8	10	nw.	U. S. Forest Service.
Garfield	Chaffee	9,510	2								1.00	.....	0.25	15.0	9	10	5	15	w.	Lloyd N. Felton.
Hamps	Elbert	5,400	19	43.5	− 1.9	77	30	14	19	45	1.13	− 0.94	0.65	8.2	5	16	6	8	n.	W. Hamp.
Hermit Lake	Custer	10,000	2								7.64	.....	0.92	73.0	14	4	12	14	sw.	John E. Graham.
Hoehne (near)	Las Animas	5,700	20	47.4	− 1.2	77	30	17	1	49	1.40	− 0.25	0.83	2.0	5	19	7	4	w.	S. W. De Busk.
Holly	Prowers	3,380	17	51.8	− 1.5	84	5	22	7	48	0.93	− 0.79	0.48	1.0	4	14	9	7	se.	Holly Sugar Co.
La Junta	Otero	4,052									0.58	.....	0.27	0.2	5	10	10	10	se.	R. B. Elliott.
Lake Moraine	El Paso	10,265	18	29.2	− 3.4	51	30	5	21	31	2.23	− 1.13	0.53	38.0	13	9	14	7	sw.	Clyde C. McReynolds.
Lamar	Prowers	3,592	22	52.4	− 1.4	85	30	25	7	42	1.15	− 0.75	0.75	12.5	2	23	5	2	s.	J. T. Lawless.
Las Animas	Bent	3,899	44																	F. M. Tague.
La Veta Pass	Costilla	9,000	2								1.47	.....	0.38	15.4	5	5	16	9	w.	Clara M. Wright.
Leadville	Lake	10,248	16	28.2	− 4.1	52	7.	7	22	41	0.62	− 0.98	0.19	9.1	12	8	16	6	w.	U. S. Weather Bureau.
Limon (near)	Elbert	5,360	5	43.5	.....	76	30	16	19	43	1.40	.....	0.60	8.0	5	13	12	5	s.	F. L. Palmer.
Madrid	Las Animas	.....	2								1.37	.....	0.57	1.0	6	.....	.....	.....	.....	Thomas Sawers.
Manitou	El Paso																			John Faucher.
Marshall Pass	Saguache	10,846	9								1.33	.....	0.35	16.0	6	13	0	17	.....	W. L. Williams.
Monument	El Paso	7,200	1	38.2	.....	63	3†	13	7	41	1.17	.....	0.54	9.3	5	14	11	5	e.	U. S. Forest Service.
North Lake	Las Animas	8,700	20								3.05	+ 0.54	0.56	34.0	10	20	4	6	nw.	James W. Ingmire.
Oro	Lake																			Frank A. Aicher.
Pueblo	Pueblo	4,734	24	48.8	− 1.7	81	30	24	7	48	1.21	− 0.22	0.46	5.1	7	11	17	2	se.	U. S. Weather Bureau.
Rocky Ford (near)	Otero	4,177	23																	B. K. Blinn.
St. Elmo	Chaffee	9,500	3								0.68	.....	0.20	10.5	9	14	10	6	sw.	Daniel Clark.
Salida	do	7,035	13	39.8	− 4.3	68	29	11	1	42	0.40	− 1.40	0.24	1.7	3	24	4	2	w.	M. D. L. Buell.
Santa Clara	Huerfano	8,252	17	39.4	− 3.2	66	30	14	2	39	2.16	− 1.16	0.63	20.0	8	6	24	0	.....	Lincoln G. Morris.
Sheridan Lake	Kiowa	4,065	10																	Howard Gamble.
Stonewall	Las Animas	8,000	6								1.28	.....	0.44	6.4	5	10	7	13	w.	G. A. Story.
Trinidad	do	5,994	16	46.6	.....	74	30	22	1†	37	1.32	− 0.49	0.75	2.0	5	10	11	9	.....	Walter Dearden.
Two Buttes	Baca	4,100	1																	N. G. Jones.
Victor	Teller	10,100	8	33.2	.....	54	30	14	13	32	0.50	.....	0.30	9.0	2	23	6	1	w.	Fred Jones.
Vilas	Baca	3,935	21								2.30	+ 0.42	1.72	T.	3	17	6	7	sw.	Carrie Konkel.
Wayne	El Paso		1								1.10	.....	1.10	6.0	2	14	9	7	sw.	J. C. Groff.
Westcliffe	Custer	7,864	18	39.2	− 1.9	67	29	14	19	43a	1.48	− 0.24	0.65	20.0	6	7a	10a	12a	sw.	Zack Jordan.
Winfield	Chaffee	9,765	2								0.25	.....	0.06	4.2	9	4	16	10	w.	John G. Payne.
Woodman Sanatorium	El Paso		1	43.0	.....	70	30	20	7	38	1.27	.....	0.80	10.2	4	18	8	4	n.	Dr. J. E. White.
Wortman	Lake	11,250	11								1.25	− 2.05	0.30	27.5	9	4	13	13	nw.	George C. Wortman.
New Mexico.																				
Abbott	Mora	5,771	3			82	30				0.73	.....	0.32	4.0	4	15	10	5	s.	Agent E. P. & S. W. R. R.
Albert	Union	4,700	22	53.0	− 2.8	85	30	30	8	44	1.26	+ 0.10	0.48	0	4	.....	.....	.....	w.	Andrew Knell.
Aurora	Colfax	8,849	3								1.15	.....	0.32	12.5	11	2	18	10	nw.	Miss J. Lucero.
Bell Ranch	San Miguel	4,500	13	52.8	.....	86	30	27	2	45	0.82	− 0.64	0.29	0	6	20	3	7	w.	C. M. O'Donel.
Black Lake	Colfax	8,348	3								0.39	.....	0.18	1.8	6	8	15	7	w.	Ralph T. Martinez.
Cabeza	San Miguel	5,406	3	49.6	.....	81	5	30	1†	40	2.34	.....	1.20	1.0	7	7	17	6	sw.	Agent E. P. & S. W. R. R.
Campana	do	4,493	3								0.95	.....	0.26	0	8	22	0	8	sw.	Do.
Chacon	Mora	9,000	3								1.36	.....	0.48	12.5	7	0	27	3	w.	Alfred Lucero.
Cimarron (near)	Colfax	6,385	8	44.8	.....	74	30	20	22	47	0.67	.....	0.58	0	4	10	14	6	s.	William French.
Clayton	Union	5,178	7																	Dr. W. W. Chilton.
Clovis	Curry	4,129	1																	J. H. Barry.
Cuervo	Guadalupe	4,849	3	53.1	.....	80	11	29	1	46	0.30	.....	0.30	.....	1	21	1	8	sw.	Agent E. P. & F. W. R. R.
Dawson	Colfax	6,396	3								1.30	.....	0.80	T.	2	5	21	4	se.	Do.
Elizabethtown	do	8,465	7	34.4	.....	64	30	5	1	44	0.48	.....	0.15	7.0	6	10	16	4	sw.	Miss M. Carrington.
Folsom	Union	6,399	12	44.6	− 2.7	76	30	19	7	40	2.04	− 0.57	0.87	9.5	7	18	7	5	sw.	David Rope.
Fort Union	Mora	6,835	52	40.8	− 6.9	73	30	15	23	45	0.67	− 0.22	0.16	2.0	6	19	7	4	w.	M. C. Needham.
Hayden	Union	4,444	2	50.8	.....	83	30	22	7	43	2.77	.....	1.23	1.0	7	11	18	1	sw.	James B. Dickson.
Hoosier Ranch	Mora		1								0.56	.....	0.23	2.0	5	17	12	1	sw.	W. H. Guthman.
Johnsons Park	Colfax	6,722	3								2.15	.....	0.95	.....	7	7	16	7	sw.	A. J. Meloche, jr.
Kappus	Quay	4,010	1								0.79	.....	0.30		5					A. Kappus.
Lake Alice	Colfax	7,160	3								2.86	.....	1.30	8.0	5					John Bell.
Logan	Quay	3,851	6	54.0	.....	88	30	29	2	45	0.98	.....	0.50	0	3	23	6	1	sw.	John B. Reneau.
Lykins (near)	Roosevelt	5,000	2								0.90	.....	0.40	.....	3	20	7	3	sw.	J. G. Buchanan.
Maxwell (near)	Colfax	5,894	5								0.90	.....	0.46		4					Dan N. Jackson.
Melrose	Curry	4,400	4								0.53	.....	0.27	0	3					Dr. B. M. Porter.
Miami Ranch	Colfax	6,000	4	45.0	.....	75	30	23	1†	44	0.76	.....	0.57	0	4	5	25	0	w.	Farmers' Development Co.
Mills (near)	Mora	5,985	1								1.06	.....	0.22	2.0	8	11	7	12	sw.	J. E. LaRue.
Montoya	Quay	4,335	3			83	30				0.45	.....	0.25	T.	2	15	2	13	w.	Agent E. P. & S. W. R. R.
Mount Dora (near)	Union	5,600	1	47.2	.....	80	30	17	2	41	2.20	.....	1.20	6.0	5	5	19	6	sw.	Edward F. Grygla.
Nara Visa	Quay	4,225	6	53.0	.....	80	26†	29	2	42	1.31	.....	0.48	0	7	18	7	5	sw.	George Bringle.
Palo Verde	Mora	5,880	1								0.78	.....	0.34	2.5	7	2	27	1	sw.	G. R. Abernathy.
Pasamonte	Union		3								1.58	.....	0.52	2.0	5	16	10	4	w.	J. J. Heringa.
Pleasant View	Mora		1								1.34	.....	0.27	3.0	8	16	13	1	sw.	R. W. Boulware.
Portales	Roosevelt	4,004	2																	Portales Irrigation Co.
Raton	Colfax	6,660	14	43.0	− 5.4	70	10	18	2	41	2.63	+ 1.42	1.20	14.5	5	17	9	4	w.	Humphrey & Wiseman.
Rociada	San Miguel	8,200	8	43.4	.....	70	30	18	2	41	0.64	.....	0.20	6.5	4	11	17	2	w.	J. E. Dailey.
Rosebud	Union	4,500	1								3.29	.....	1.56	0	5					H. A. Nachtrieb.
Roy	Mora	5,884	3								0.98	.....	0.45	2.0	5	9	19	2	sw.	Agent E. P. & S. W. R. R.
Roy (near)	do	5,880	1								0.64	.....	0.36	2.0	3	16	14	0	sw.	Baum Bros.
San Jon	Quay	4,200	5	53.2	.....	88	30	25	2	44	1.03	.....	0.32	T.	6	20	4	6	sw.	Jesse T. White.
Solano	Mora	5,622	3	47.8	.....	70	4†	24	21	39	0.90	.....	0.32	2.5	6	21	6	3	sw.	F. M. Hughes.
Springer	Colfax	5,857	20	46.7	− 2.9	78	30	20	1	54	0.13	.....	0.10	0	1	24	6	0	w.	Agent A., T. & S. F. R. R.
Taylor	do	5,661	3			80	30	20	2†		0.56	.....	0.42	0.5	3	16	13	1	sw.	Agent E. P. & S. W. R. R.
Trementina	San Miguel	5,000	4								0.68	.....	0.25	0	7	11	6	13	.....	Miss Alice Blake.
Tucumcari	Quay	4,194	7	55.2	.....	87	30	30	2	40	1.01	.....	0.38	0	6	19	10	1	w.	John F. Seaman.
Valley	Union	5,000	7	52.0	.....	79	30	29	8†	43	1.60	.....	1.00	1.0	5	17	13	0	s.	Miss M. L. Payne.
Vance (near)	do		1								2.54	.....	1.02	2.0	8	13	11	6	sw.	C. E. Anderson.
Vermejo Park	Colfax	7,600	7	41.4	.....	72	27	14	2	50	0.70	.....	0.26	1.0	4	21	4	5	w.	H. W. Adams.
Wagon Mound (near)	Mora	6,300	3	43.6	.....	78	30	18	2	48	1.00	.....	0.40	2.0	8	15	9	6	sw.	Guy L. Barnes.

TABLE 1.—*Climatological data for April, 1912. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit: Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches: Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Sky: Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Texas.																				
Amarillo	Potter	3,676	20	54.6	0.0	89	30	31	2	39	0.72	−1.00	0.20	T.	9	20	9	1	sw.	U. S. Weather Bureau.
Archer City	Archer		1								0.98		0.49	0	4	16	11	3	se.	Charles H. Thuman.
Arthur City	Lamar	590	20								3.35	−0.72	1.20	0	6	15	0	15		V. V. Bright.
Bonham	Fannin	566	9	63.4		90	15	39	8	34	5.24		1.54	0	7	17	4	9	s.	H. M. Norman.
Canadian	Hemphill	2,339	5	56.9		91	30	32	1	38	2.27		0.87	0	7	11	13	6	sw.	Canadian Academy.
Childress	Childress	1,869	19								1.43	−1.06	0.48	0	4	20	0	10	n.	George Baker.
Chillicothe	Hardeman	1,406	4								1.82		1.01	0	3					A. B. Connor.
Clarendon	Donley	2,719	7	57.9		87	10	33	7	44	2.14		0.66	0	9	15	9	6	sw.	Whitfield Carhart.
Clarksville	Red River	442	12	66.2	+1.7	87	15	41	2†	34	3.36	−2.92	1.46	0	6	12	4	14		J. W. O'Neill.
Claude	Armstrong	3,397	7								1.60		1.10	0	2					Ft. W. & D. C. Ry.
Dalhart	Dallam	3,998	7	51.6		86	30	26	7	45	2.56		0.80	0	10	12	9	9	sw.	W. D. Griggs.
Denison	Grayson		12								6.36	+2.40	1.70	0	11	9	2	19	s.	E. B. Wilson.
Finley	Bowie		2								4.85		1.30	0	7	14	0	16	s.	Robert L. Smith.
Henrietta	Clay	915	20	63.1	0.0	99	22	40	17	52	2.34	−0.45	1.00	0	5	16	0	14	s.	C. K. Brown.
Hereford	Deaf Smith	3,750	7																	A. C. Elliott.
Memphis	Hall	2,067	7	59.2[d]		95	30	35	1	54	1.02		0.45	0	3	26	0	4		Ft. W. & D. C. Ry.
Miami	Roberts	2,743	6	56.9		85	5†	30	7†	46	0.81		0.44	T.	3	18	9	3	s.	J. E. Kinney.
Mobeetie	Wheeler		18																	Dr. W. J. Joss.
Ochiltree	Ochiltree		4																	S. J. Allen
Panhandle	Carson	3,450	3																	J. Sid O'Keefe.
Paris	Lamar	592	23	62.2	−1.7	88	15	39	3	38	6.39	+3.16	1.75	0	12	9	2	19	s.	Robert A. Miller.
Plemons	Hutchinson		5	53.7		90	30	23	7	52	2.22		0.75	0	7	13	10	7	s.	C. S. Solomon.
Quanah	Hardeman	1,563	10	62.2		96	30	37	2	42	1.50	−0.22	0.90	0	3	14	10	6	s.	William H. Crawford.
Kingo Crossing	Hopkins		2								5.08		1.65	0	6	9	2	19	ne.	H. J. Palmer.
Romero	Hartley		2	53.4		87	30	27	7	49	0.95		0.27	T.	6	16	8	6	sw.	R. S. Chamberlain.
Sherman	Grayson	745	19																	R. A. Gibbs.
Stratford	Sherman	3,699		54.5		90	30	26	7	47	1.65		0.48	T.	9	13	10	7	s.	J. W. Elliott.
Texline	Dallam	4,694	7								2.20		1.90	3.0	2					Ft. W. & D. C. Ry.
Tulia	Swisher	3,501	14	56.0	−0.1	95	30	28	2	49	1.06	−0.89	0.26	T.	6	11	15	4	s.	Lou Mulhall.
Wellington	Collingsworth										1.80		0.65	0	7					J. D. Camp.
Wichita Falls	Wichita	958	20								2.15	−0.48	0.70	0	6	13	14	3	s.	E. F. Mittmann.
Winfield	Titus		2								7.11		1.85	0	8	4	21	5	se.	J. B. Newberry.
Kansas.																				
Alden	Rice	1,684	2								0.54		0.54	0	1	17	0	13	se.	L. B. Wait.
Anthony	Harper	1,329	15	56.5		83	5	30	17	41	3.29	+0.16	0.75	0	9				sw.	R. H. Beebe.
Ashland	Clark	1,951	24	55.0	−2.3	93	30	28	8	48	1.80	−0.16	1.01	T.	8	21	6	3	s.	C. W. Carson.
Burlington	Coffey	1,010	19	55.8	−0.8	83	12	34	7†	42	3.92	+0.43	1.45	0	7	0	24	6	s.	O. E. Sanford.
Chanute	Neosho	940	8	57.2		86	25	35	7†	39	5.81		1.45	0	9	6	17	7	se.	C. W. Brown.
Cimarron	Gray	2,700		53.4		85	5	27	22	45	3.28		2.77	T.	6	19	5	6	sw.	C. C. Isely.
Coffeyville	Montgomery	744		58.6		84	27	34	2	32	7.10		4.02	0	10	13	0	17	s.	A. F. Briggs.
Coldwater	Comanche	2,090	15	55.0	−1.8	92	30	29	17	44	1.77	+0.22	0.98	T.	7	20	5	5	s.	J. L. Stanley.
Columbus	Cherokee	898	22	56.2	−0.3	79	11	32	2	35	6.87	+2.79	3.13	1.5	10	17	4	9	s.	O. E. Skinner.
Coolidge	Hamilton	3,348	15	50.4	−2.9	86	5	20	7	53	1.19	−0.53	0.42	5.0	4	12	11	7	se.	W. R. Padley.
Cottonwood Falls	Chase	1,234	8	56.7		80	5	32	18	40	2.97		0.95	0	6	19	2	9	s.	E. B. Greene.
Council Grove	Morris	1,234	3	57.2[f]		82[m]	12	31[f]	7	38[m]	1.15		0.20	0	11	6	10	5	s.	J. P. Blackledge.
Cunningham	Kingman	1,680	28	55.6	−1.1	85	5	27	17	41	2.81	+0.33	0.95	0	6	13	13	4	se.	W. H. Morton.
Dodge City	Ford	2,513	38	52.8	−1.6	85	5	27	18	41	1.73	−0.14	1.54	T.	6	12	12	6	se.	U. S. Weather Bureau.
Eldorado	Butler	1,291	10	56.5		81	12	33	24	42	5.12		2.21	0	9	18	6	6	s.	W. Y. Miller.
Ellinwood	Barton	1,790	37	54.4	−0.9	86	5	23	17†	43	2.09	−0.09	1.21	0	7	5	19	6	sw.	Martin Musil.
Emporia	Lyon	1,138	31	55.0	−0.2	82	12	33	7	41	2.04	−0.89	0.72	0	6	14	5	11	s.	W. H. Boyles.
Eureka	Greenwood	1,079	16	57.4		81	12	31	7	41	6.31	+3.65	3.20	0	8	12	13	5	s.	Mrs. T. C. Peffer.
Fall River	do.	925	16	57.6	+1.3	81	12	31	8	41	5.22	+2.53	2.15	0	10	18	10	2	s.	J. McDaniel.
Fargo	Seward		2								2.57		1.56	2.0	3	10	18	2	s.	N. B. Swink.
Fredonia	Wilson	975	9	57.2		80	12	34	7	35	5.37		2.30	0	8	14	10	6	nw.	B. W. Holmes.
Garden City	Finney	2,836	23	52.6	−2.0	86	5	23	7	50	2.36	+0.30	2.07	T.	3	12	7	11	s.	B. F. Stocks.
Great Bend	Barton	1,850	3								2.33		0.93	0	4	17	6	7	sw.	I. Pritchard.
Greensburg	Kiowa	2,235	5	54.0		90	30	27	17	43	0.95		0.75	T.	5	18	5	7	n.	C. C. Raymond.
Grenola	Elk	1,116	24	56.6	−0.8	80	12	30	8	42	5.50	+2.51	1.73	0	10	15	9	6	sw.	W. H. Lawyer.
Hess	Gray	2,700	6	51.6		85	5	23	7	48	1.87		1.45	T.	5	14[a]	10[a]	5[a]	s.	Harry Jacques.
Howard	Elk	1,112	5	57.0		79	12	31	8	40	5.52		1.94	0	11	18	7	5	sw.	J. W. Eby.
Hugoton	Stevens		8	53.2		90	5	22	7	55	3.07		1.92	1.5	7	17	8	5	s.	F. A. McCoy.
Hutchinson	Reno	1,535	22	55.0	−1.5	84	5	26	18	41	2.07	−0.41	0.96	0	8	15	8	7	sw.	E. S. Webster.
Independence	Montgomery	800	38	57.9	−1.0	80	12	35	2†	39	8.48	+4.80	3.43	0	12	13	10	7	s.	F. L. Kenoyer.
Iola	Allen	984	6	56.0	+1.8	80	12	35	17	37	5.70	+2.91	2.65	T.	12	15	7	8	s.	U. S. Weather Bureau.
Irene	Hamilton	3,440	2	50.5		87	4	22	7	51	1.94		1.05	T.	4	11	9	10	sw.	N. M. Herbig.
Jetmore	Hodgeman	2,268	11	53.0		87	5	23	18	43	2.82	+1.27	2.63	T.	4	7	15	8	ne.	James Aiken.
Kingman	Kingman	1,504	4	56.9		84	5	30	18	40	1.94		0.80	0	9	16	10	4	sw.	B. B. Anawalt.
La Crosse	Rush	2,061	10	54.1		89	30	19	18	43	1.14	−0.80	1.14	0	1	14	11	5	se.	Rodney Torrey.
Lakin	Kearny	2,993	22	49.1[d]	−5.0	83[g]	30	22	7	47[g]	2.21	−0.06	1.55	2.0	4	14	12	4	sw.	C. H. Longstreth.
Larned	Pawnee	2,090	27	54.9		87	5	21	18	41	1.43	−0.39	1.34	T.	3	16	7	7	n.	H. H. Wolcott.
Lebo	Coffey	1,138	26	56.0	+0.1	83	12	33	7	42	1.86	−1.10	0.69	0	5	15	7	8	s.	J. J. Bowman.
Le Roy	do.	990	3								4.51		1.62	0	9	12	2	16	s.	F. W. Schmitt.
Liberal	Seward	2,843	5	53.8		87	30	28	7	50	1.39		0.35	1.0	7	20	1	9	s.	Dr. R. T. Nichols.
Macksville	Stafford	2,032	23	53.0	−1.3	89	30	23	18	42	1.16	−1.01	0.43	0	6	17	8	5	s.	Mrs. Nelia Poling.
McPherson	McPherson	1,495	23	54.8	−0.9	81	5†	30	17	36	1.95	−1.66	0.86	0	8	17	1	12	sw.	Ed. F. Haberlein.
Madison	Greenwood	1,074	11	54.4	−0.7	82	12	28	17	46	3.09	−0.24	1.04	0	6	5	19	6	se.	C. A. David.
Marion	Marion	1,310	19	56.2	−0.6	82	5†	30	7	42	1.26	−1.65	0.60	0	10	11	13	6	s.	Jerry Forney.
Medicine Lodge	Barber	1,259	19	56.0	−2.4	88	5	29	17	45	3.81	+1.65	1.66	0	8	17	6	7	s.	S. P. Garrison.
Medora	Reno	1,484	3								2.22		1.03	0	8	12	3	15	s.	M. L. Rickenbrode.
Mount Hope	Sedgwick	1,410	15								2.30	−0.25	0.85	0	6	17	7	6	s.	H. N. Renfrew.
Neosho Rapids	Lyon	1,092	7								2.14		0.80	0	6	20	3	7	nw.	W. H. McMullin.
Ness City	Ness	2,260	19								2.10	−0.08	1.38	0	2					J. K. Barnd.
Newton	Harvey	1,454	15	55.8	+1.2	82	5	32	17	40	2.12	−0.86	1.00	0	6	14	11	5	se.	H. A. Brush.
Norwich	Kingman	1,496	16	56.8	−0.3	81	25†	30	18	34	3.53	+0.61	1.20	0	9	12	13	5	se.	N. I. Farris.
Oswego	Labette	899	18	58.0	+0.2	79	12†	32	2	32	6.41	+2.50	2.77	0	13	11	12	7	sw.	Jas. M. Currigan.
Plains	Meade	2,766	2	52.6		86	30	30	1†	45	1.88		0.51	T.	7	13	11	6		E. J. Henning.
Pratt	Pratt	1,950	17	57.0	+2.2	87	5	28	18	44	2.07	−0.82	1.00	0	5	20	7	3	sw.	T. J. Arnold.
Richfield	Morton		1	51.3	−3.7	85	10	24	7†	54	2.88	+1.08	1.58	1.0	6					M. J. Allen.
Rome	Sumner	1,218	26	56.6	−1.2	81	11	32	18†	46	5.35	+2.16	1.33	0	9	16[a]	7[a]	6[a]	s.	D. M. Adams.
Sedan	Chautauqua	834	27	57.4	+0.1	81	12	34	19	42	7.43	+4.16	3.24	0	11	14	10	6	s.	A. Y. Buckles.
Toronto	Woodson	1,040	15	57.6	+3.1	83	12	32	8	45	5.77	+2.63	2.05	0	7	18	6	6	s.	M. A. Webb.
Ulysses	Grant	3,027	21	52.6[d]	−1.1	85	4†	25	7	48	2.30	+0.62	1.50	2.5	5	15	9	6	sw.	T. W. Marshall.
Walnut	Crawford	940	10	56.6[d]	+0.1	79	12	36	7	34	9.44		3.34	0	11	15[e]	5[e]	7[e]	sw.	R. C. Harlan.
Wellington	Sumner	1,225	16	57.3	−0.4	81	11†	27	18	43	3.86	+0.65	0.90	0	11	15	4	11	s.	E. O. G. Kelley.
Wichita	Sedgwick	1,377	25	54.7	−1.9	78	30	32	18	31	3.87	+1.18	2.14	0	9	10	12	8	s.	U. S. Weather Bureau.
Winfield	Cowley	1,124	18	56.9	0	82	12	33	8	39	5.92	+2.96	2.19	0	8	18	5	7	s.	M. B. Light.
Yates Center	Woodson	1,068	33	54.8	−0.7	80	12	31	13†	47	5.26	+2.36	1.56	T.	12	14	10	6	n.	J. W. Tipton.

TABLE 1.—*Climatological data for April, 1912. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Oklahoma.																				
Ada	Pontotoc	1,001	4	60.7	.....	83	24	38	17	34	4.59	.....	1.57	0	10	13	7	10	s.	W. S. Creveling.
Alva	Woods	1,350	7	57.3	.....	87	30	31	17	38	2.41	.....	0.50	2.0	6	12	12	6	s.	S. A. Stech.
Apache	Caddo	1,255	2	60.9	.....	89	30	33	17	39	2.07	.....	0.54	0	7	20	7	3	sw.	G. D. Teeter.
Arapaho	Custer	1,575	18	59.8	+ 0.3	90	25	32	8†	42	2.58	− 0.30	1.43	0	5	21	2	7	s.	J. C. Brower.
Ardmore	Carter	872	10	62.0	+ 0.3	85	24†	40	2†	35	4.26	+ 0.72	1.60	0	11	11	6	13	n.	H. T. Nisbett.
Arnett	Ellis	2,136	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Holmes.
Bartlesville	Washington	687	4	58.2	.....	81	12	35	18	37	8.69	.....	2.60	0	10	20	4	6	sw.	Dr. A. P. Owens.
Beaver	Beaver	2,500	15	55.6	− 2.0	95	27	30	7†	48	1.69	− 0.50	0.76	6.2	6	25	1	4	s.	W. C. Frazer.
Blackburn	Pawnee	800	10	60.2	+ 0.2	84	12	33	8	38	8.36	+ 3.92	4.70	0	10	23	6	1	sw.	M. M. Rhodes.
Cache	Comanche	1,350	6	60.3	.....	90	...	28	...	42a	0.96	.....	0.32	0	5	15	10	5	n.	Mrs. Frank Rush.
Calvin	Hughes	713	7	.....	.....	.....	.....	.....	.....	.....	6.90	.....	3.11	0	12	12	0	18	s.	Thomas Purcell.
Chandler	Lincoln	865	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Chas. L. Kern.
Chattanooga	Comanche	1,150	6	62.2	.....	89	30	36	8	36	1.91	.....	0.75	0	5	10	15	5	s.	Squire Humble.
Chickasha	Grady	1,091	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Good.
Cloud Chief	Washita	1,400	10	62.1	+ 2.2	87	30	31	8	41	3.60	+ 0.82	1.65	0	5	14	10	6	ne.	J. P. Stutzman.
Crawford	Roger Mills	.....	.....	60.6	.....	93	30	48	18	27	3.00	.....	1.20	0	5	.....	.....	.....	s.	W. O. Horr.
Durant	Bryan	643	10	60.8	− 0.7	88	26	40	3†	35	3.60	− 0.08	1.25	0	9	15	8	7	s.	Nelson Houk.
Eldorado	Jackson	1,436	5	61.6	.....	96	...	34	...	43a	1.87	.....	0.65	0	5	13a	15a	1a	se.	T. W. Lanham.
Elk City	Beckham	.....	.....	59.2	.....	87	25†	32	7	47	4.04	.....	3.04	0	4	23	0	7	s.	R. J. Carlile.
El Reno	Canadian	1,400	20	60.8	+ 0.6	86	11†	33	17	40	4.19	+ 0.98	1.85	0	8	15	9	6	s.	Rose E. Walker.
Enid	Garfield	1,269	10	58.1	+ 0.2	84	12	32	18	38	10.01	+ 7.37	8.30	0	6	19	6	5	s.	Uri B. Worcester.
Erick	Beckham	2,058	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. W. Hanes.
Eufaula	McIntosh	566	..	61.6	.....	92	19	33	8	45	6.12	.....	3.73	0	7	16	8	6	s.	R. Uhl Brown.
Fairland	Ottawa	839	12	58.9	+ 1.1	82	12†	33	2	37	6.21	+ 2.54	2.28	T.	10	7	19	4	s.	C. W. Prier.
Fort Gibson	Muskogee	556	7	.....	.....	.....	.....	.....	.....	.....	4.56	.....	1.05	0	12	11	1	18	s.	John T. Welsh.
Frederick	Tillman	1,293	5	62.8	.....	95	25†	33	17	42	1.37	.....	0.51	0	4	14	13	3	se.	B. B. Bradley.
Geary	Blaine	1,546	..	59.8	.....	92	26	31	17	41	4.12	.....	1.57	0	9	23	5	2	s.	O. P. Ruth.
Goodwell	Texas	3,300	1	53.4	.....	84	30	23	13	52	1.32	.....	0.40	1.0	4	20	0	10	s.	S. W. Black.
Guthrie	Logan	1,000	19	60.7	− 1.0	84	11	34	17	42	4.80	+ 1.67	2.85	0	7	19	4	7	s.	S. E. Snyder.
Guymon	Texas	3,133	2	.....	.....	.....	.....	.....	.....	.....	1.70	.....	0.60	T.	6	25	3	2	sw.	A. L. Mordt.
Hartshorne	Pittsburg	700	13	63.6	+ 1.7	85	24†	36	8	37	2.27	− 1.93	0.65	0	10	18	7	5	s.	Frank Webber.
Healdon	Carter	900	18	62.4	− 0.3	85	24†	31	8	40	5.44	+ 1.80	2.05	0	9	10	15	5	s.	C. H. Heald.
Helena	Alfalfa	1,396	4	59.1	.....	85	26	35	1	41	3.95	.....	1.05	0	8	17	11	2	s.	R. E. Ellis.
Hennessy	Kingfisher	1,166	17	59.0	− 1.5	84	...	32	...	36b	4.38	+ 1.69	2.25	0	5	11	17	2	s.	Mrs. M. C. Parks.
Hobart	Kiowa	1,396	9	59.8	.....	91	...	33	...	39a	5.02	.....	4.26	0	6	7a	18a	4a	s.	Rev. J. F. Black.
Holdenville	Hughes	900	11	59.5	+ 0.2	83	24	38	17	35	4.93	+ 1.52	1.32	0	10	15	9	6	s.	Eula L. Rutherford.
Hooker	Texas	3,038	6	53.8	.....	88	30	25	7	47	1.65	.....	0.59	0	6	8	3	19	s.	H. N. Kelly.
Hurley	Cimarron	4,200	4	51.8	.....	86	...	31	...	42a	0.78	.....	0.66	T.	2	12	6	12	sw.	Dr. C. W. Meyers.
Idabel	McCurtain	474	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. L. Henderson.
Jefferson	Grant	1,062	18	57.1	− 1.2	84	30	31	8	44	4.40	+ 1.64	1.48	0	8	15	12	3	s.	T. E. Beck.
Kenton	Cimarron	4,000	11	51.8	− 1.4	85	30	24	7	45	1.10	− 0.68	0.39	2.0	8	14	9	7	n.	Wm. M. Guy.
Kingfisher	Kingfisher	1,046	15	60.4	+ 0.1	84	11†	33	8	45	4.67	+ 1.71	2.97	0	13	12	16	2	s.	J. C. Cross.
Lawton	Comanche	1,111	.....	.....	.....	.....	.....	.....	.....	.....	2.60	.....	1.02	0	7	13	15	2	s.	F. C. Davis.
McAlester	Pittsburg	698	15	62.6	.....	86	24	37	8	37	4.58	+ 0.39	1.23	0	11	15	1	14	s.	Wm. Noble.
Mangum	Greer	1,585	19	60.7	− 1.4	95	30	34	8†	46	5.65	+ 3.45	5.22	0	5	23	1	6	se.	F. D. Dodson.
Marlow	Stephens	1,292	11	61.3	+ 0.7	86	30	37	8	35	4.34	+ 0.63	1.10	0	8	12	3	5	se.	Wm. B. Anthony.
May	Harper	.....	.....	56.4d	.....	95	...	26	...	56d	2.27	.....	1.10	5.0	4	12d	2d	9d	s.	G. C. Gray.
Meeker	Lincoln	1,030	18	61.2	+ 0.5	87	1	34	8	45	3.74	+ 0.01	1.32	0	6	19	3	8	s.	Dr. J. H. Baugh.
Muskogee	Muskogee	614	13	61.4	+ 1.3	83	24	35	18	33	4.41	+ 0.53	1.40	0	6	14	3	13	n.	J. Harry Randall.
Mutual	Woodward	.....	4	56.2	.....	90	11	30	1†	42	2.30	.....	1.29	0	4	19	5	6	s.	Thos. Martin.
Neola	Caddo	1,500	6	60.3	.....	89	25	32	8	37	2.55	.....	1.70	0	9	14	14	2	s.	R. N. Schooling.
Newkirk	Kay	1,149	14	59.3	+ 0.5	83	13†	33	17†	40	6.35	+ 3.55	2.10	0	9	15	9	6	s.	P. H. Albright & Co.
Norman	Cleveland	1,171	17	59.6	− 1.3	85	30	34	8	38	2.48	− 0.81	0.66	0	9	13	15	2	s.	S. E. Boyd.
North Muskogee	Muskogee	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.47	.....	1.11	0	9	14	2	14	s.	J. E. Walker.
Oakwood	Dewey	1,854	2	55.6	.....	88	25	27	8	36	5.26	.....	3.15	0.5	10	21	4	5	s.	Dr. F. P. Osborn.
Okeene	Blaine	1,194	7	59.6	.....	88	25	32	17	50	6.50	.....	3.85	0	10	22	6	2	s.	Dr. L .H. Murdoch.
Oklahoma	Oklahoma	1,247	22	58.8	− 0.8	81	30	35	2	33	2.81	+ 0.01	1.04	0	8	11	14	5	s.	U. S. Weather Bureau.
Okmulgee	Okmulgee	752	7	63.1	.....	84	....	38	.....	35b	2.83	.....	0.93	0	5	12	5	13	s.	J. L. Maynard.
Pauls Valley	Garvin	880	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. M. Foss.
Pawhuska	Osage	918	11	60.6	+ 2.0	87	20	34	2†	43	8.82	+ 5.58	4.35	0	7	17	8	5	s.	R. C. Block.
Perry	Noble	920	13	59.6	+ 0.5	85	25	33	17	44	8.25	+ 4.65	7.03	0	8	12	13	5	se.	G. C. Wollard.
Rankin	Roger Mills	2,200	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. Compton.
Ravia	Johnston	796	9	62.1	.....	85	24†	38	3†	33	1.42	.....	0.53	0	5	14	3	13	s.	R. G. Guptill.
Sac and Fox Agency	Lincoln	900	18	60.6	+ 0.3	82	24	37	18	36	4.07	+ 1.05	1.70	0	7	15	7	8	s.	M. R. Gayle.
Shawnee	Pottawattomie	1,041	10	58.2	− 3.3	82	30	35	17	36	3.92	+ 0.57	1.25	0	12	9	12	9	nw.	Mrs. Kate Chatman.
Snyder	Kiowa	1,356	5	62.0	.....	93	30	37	17	41	2.19	.....	0.62	0	6	15	13	2	sw.	Dr. W. C. Woodard.
Stillwater	Payne	880	19	59.4	+ 0.2	84	30	35	17†	41	6.54	+ 3.05	5.18	0	11	18	8	4	se.	A. R. Evans.
Tulsa	Tulsa	700	23	60.2	.....	83	12†	36	8†	35	5.94	+ 2.45	3.04	0	11	13	11	6	n.	Dr. H. M. Hutchinson.
Vinita	Craig	698	8	59.2	.....	81	...	34	...	35b	8.61	.....	4.09	0	8	19b	0b	9b	sw.	W. C. Chamberlain.
Wagoner	Wagoner	588	15	59.1	0.0	84	30	33	18	37	7.90	+ 4.22	2.00	0	8	14	0	16	s.	S. L. Hatfield.
Waukomis	Garfield	1,258	15	58.7	− 0.4	88	12	33	8	39	8.87	+ 5.88	4.15	0	7	17	12	1	se.	R. C. Shades.
Waurika	Jefferson	988	1	62.0	.....	89	30	36	8	37	2.27	.....	0.89	0	7	14	9	7	s.	B. A. Swindler.
Weatherford	Custer	1,639	10	58.6	− 0.2	89	25	32	17	42	2.95	+ 0.25	2.33	0	7	15	6	9	n.	Eugene Forbes.
Webbers Falls	Muskogee	479	13	60.8	+ 0.8	89	24	32	18	44	4.24	+ 0.49	2.20	0	5	7	14	9	sw.	B. D. Boulineau.
Whiteagle	Kay	945	8	59.3	.....	82	12†	32	17	38	7.59	.....	2.50	0	10	19	4	7	ne.	J. M. Dankwardt.
Woodward	Woodward	1,803	9	57.0	.....	91	30	29	2†	41	1.63	.....	0.57	0	7	21	6	3	s.	R. A. Boyle.
Wyandotte	Ottawa	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.00	.....	2.00	0	10	9	4	17	sw.	Henry Hicks.
Missouri.																				
Belle	Maries	.....	21	55.2	+ 0.8	80	5†	32	7†	34	7.68	+ 3.60	1.83	0	13	6b	14b	8b	s.	A. J. Wofford.
Birchtree	Shannon	1,200	19	57.2	+ 0.3	82	15	35	8	33	6.84	+ 2.17	1.98	0	13	13	6	11	s.	V. H. Kirkendall.
Cape Girardeau	Cape Girardeau	305	8	.....	.....	.....	.....	.....	.....	.....	7.31	.....	2.00	0	13	12	6	12	s.	D. L. Albert.
Cardwell	Dunklin	.....	1	62.7	.....	84	15	40	8	32	9.94	.....	3.15	0	10	17	8	5	s.	E. M. Perry.
Caruthersville	Pemiscot	.....	21	65.3	+ 6.0	97	15	38	3	44	12.18	+ 8.31	3.00	0	12	14	6	10	e.	H. E. Averill.
Cassville	Barry	.....	2	55.5	.....	80	24	26	8	41	6.12	.....	3.30	T.	11	15	4	11	se.	Mrs. Zuma Bloomer.
Dean	McDonald	.....	14	57.1	− 0.3	82	30	28	8	42	7.68	+ 3.38	3.35	0	14	19	4	7	s.	H. E. Dean.
Doniphan	Ripley	440	9	59.4	.....	86	15	33	8	30	11.16	.....	2.52	0	15	16	1	13	s.	W. W. Martin.
Gano	Dent	.....	9	57.8	.....	89	11†	30	8	40	7.75	.....	2.50	0.3	15	14	5	11	s.	A. C. Leech.
Goodland	Iron	900	8	55.9	.....	80	14	26	8	41	9.56	.....	3.20	0	10	9	12	9	s.	F. M. Adams.
Hollister	Taney	1,000	3	55.6	.....	82	5†	32	8	44	7.12	.....	2.00	0	11	18	0	12	sw.	W. P. Chapmann.
Ironton	Iron	925	35	56.6	+ 1.2	82	15	29	8	40	11.68	+ 7.30	4.50	T.	13	6	11	13	s.	W. H. Delano.
Jackson	Cape Girardeau	458	22	58.9	+ 2.4	84	15	34	8	35	6.12	+ 1.58	2.25	0	9	12	5	13	s.	L. M. Benn.
Joplin	Jasper	979	33	60.2	+ 1.9	85	12	32	2	38	7.59	+ 3.82	2.25	0	12	17	0	13	s.	Miss Ruth Smith.

TABLE 1.—*Climatological data for April, 1912. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Missouri—Continued.																				
Koshkonong	Oregon	911	12	59.2	+ 2.1	86	15	37	8†	33	7.84	+ 3.00	1.85	0	16	9	10	11	se.	J. W. Hitt.
Lamar	Barton	964	32	57.5	+ 0.6	80	13	32	3	35	6.69	+ 2.58	2.52	T.	10	11	10	9	sw.	E. H. Adams.
Marble Hill	Bollinger	420	21	56.8	+ 0.8	85	15	30	8	38	6.25	+ 1.69	2.00	0	8	10[a]	12[a]	7[a]	s.	A. F. Hendrix.
Mountaingrove	Wright	1,490	14	55.8	+ 1.5	77	21	33	18	30	7.44	+ 3.27	1.67	T.	14	8	7	15	s.	Mo. Fruit Exp. Sta.
Mount Vernon	Lawrence	1,480	32	56.5	+ 0.9	80	11†	33	2†	38	8.03	+ 4.57	4.00	T.	11	11	10	9	sw.	J. R. White & Son.
Neosho	Newton	1,023	30	58.1	− 0.1	81	30	31	8	41	8.24	+ 4.17	3.41	0.5	14	14	6	10	sw.	W. O. Buck.
New Madrid	New Madrid	285	19								8.50	+ 4.33	2.66	0	10	14	4	12	s.	Miss Josie Smith.
Oakfield	Franklin	703	21	57.1	+ 1.2	80	5†	34	3†	29	8.26	+ 4.06	1.75	0	13	7	12	11	sw.	E. E. Steines.
Olden	Howell	1,246	23	57.1	+ 0.2	82	15	33	8	38	6.85	+ 2.20	1.70	0	9	8[c]	11[c]	8[c]	sw.	J. D. Evans.
Rolla	Phelps	1,139	32	57.4	+ 2.9	79	11	32	2	38	6.96	+ 2.59	2.12	2.0	13	15	4	11	sw.	Prof. P. J. Wilkins.
Springfield	Greene	1,350	24	55.4	0.0	79	13	32	2	29	5.87	+ 2.01	2.15	0.5	13	14	7	9	se.	U. S. Weather Bureau.
Kentucky.																				
Blandville	Ballard	445	31	60.0	+ 2.8	81	15	39	8†	26	7.81	+ 3.62	1.72	0	13	7	11	12	sw.	E. W. Horr.
Tennessee.																				
Arlington	Shelby		30	61.0	+ 2.4	82	15	38	8	34	11.15	+ 7.18	4.20	0	10	11	6	13	s.	A. Thomas B. Etheridge.
Bolivar	Hardeman	450	25	60.8	+ 1.4	82	14	37	3†	38	13.90	+ 9.32	5.35	0	10	16	1	13	s.	Miss Mary A. Smith.
Brownsville	Haywood	361	27	62.4	+ 2.1	82	14	38	8	32	10.36	+ 5.66	2.40	0	14	10	7	13	s.	Miss Hattie N. Moses.
Covington	Tipton	311	25	61.0	+ 0.9	79	14†	39	8	29	9.93	+ 5.52	2.00	0	10	12	1	17	s.	James S. Ruffin.
Dyersburg	Dyer	310	29	62.2	+ 2.4	80	5†	41	8	33	6.35	+ 1.08	1.60	0	9	16	0	14	se.	Miss Martha A. Sinclair.
Jackson	Madison	450	19	62.0	+ 1.5	83	11	33	7	36	10.04	+ 4.87	2.80	0	8	9	11	10	s.	Shelby A. Robert.
Kenton	Obion	325	10	61.0	+ 2.4	81	14†	38	3†	32	10.21	+ 4.95	2.60	0	18	7	10	13	se.	George S. Martin.
Memphis	Shelby	409	41	62.6	+ 0.8	81	14	45	8	22	8.01	+ 3.18	2.44	0	12	11	4	15	s.	U. S. Weather Bureau.
Milan	Gibson	440	29	60.6	+ 1.2	81	11†	39	3†	35	10.15	+ 5.43	2.30	0	11	8	2	20	s.	Orlando F. Cantwell.
Trenton	do	345	29	62.6	+ 3.1	82	14†	37	9	37	9.00	+ 4.43	2.17	0	12	11	7	12	sw.	F. L. Dennison.
Union City	Obion	360	14	61.4	+ 3.5	83	15	36	8	33	12.02	+ 7.86	2.47	0	14	11	7	12	s.	J. B. Kimzey.
Arkansas.																				
Alicia	Lawrence		8	63.5[a]		89	25	41	23	36[a]	6.77		3.40	0	10					McCullough and Guelck.
Amity	Clark	250	20	64.4	+ 1.9	90	15	38	8†	40	9.40	+ 4.53	2.00	0	9	9	13	8	w.	J. W. Campbell.
Arkadelphia (near)	do	250	5	64.2		87	15	39	18	35	9.16		2.09	0	17	11	8	11	sw.	J. A. Ross.
Arkansas City	Desha	145	29								10.98	+ 7.20	2.40	0	12					W. C. Blundell.
Batesville	Independence	271	7								6.84		2.10	0	12					Lelia S. Teter.
Bee Branch	Van Buren		20	63.0[d]	+ 2.0	90	15	38	3	45[e]	8.05	+ 4.28	3.70	0	10					J. E. Scanlan.
Benton	Saline	283	5	61.2		90	15	30	4	47[a]	9.76		2.13	0	10	14	5	11	s.	P. B. Jackson.
Bentonville	Benton	1,308	7	57.7	+ 0.8	79	12	34	2	35	7.54	+ 3.65	3.01	0	12	16	6	8	s.	U. S. Weather Bureau.
Bergman	Boone	1,324	15	53.9	− 3.2	80	26	26	1	42	6.70	+ 2.87	2.28	0	11	13	4	13	se.	John T. Maxey.
Black Rock	Lawrence	259	8								8.40		3.05	0	12					S. J. Howe.
Brinkley	Monroe	226	26	64.0	+ 2.3	84	15	38	8	35	9.44	+ 4.91	1.81	0	12	10	7	13		H. L. D. Whitson.
Calico Rock	Izard	361	8								8.06		3.50	0	7					W. H. Stoner.
Camden	Ouachita	158	27	64.5	+ 0.9	84	13†	37	3	37	8.06	+ 3.50	1.73	0	14					R. K. Quarterman.
Centerpoint	Howard	470	12	63.9	+ 0.9	91	15	37	3†	38	8.47	+ 3.41	2.05	0	11	8	7	15	se.	J. M. Huddleston.
Clarendon	Monroe	171	8								11.96		4.30	0	14					Mrs. B. E. Bishop.
Conway	Faulkner	309	29	62.3	0.0	89	15	38	8	39	5.79	+ 2.04	2.65	0	10	9	12	9	s.	G. H. Burr.
Corning	Clay	293	20	62.2[f]	+ 3.1	86	15	37	8	33[f]	9.59	+ 5.41	2.31	0	15				s.	Jacob Brobst.
Dardanelle	Yell	330	26	61.4		92	15	36	8	45	6.55	+ 2.83	2.12	0	11					A. Bernard.
Dodd City	Marion	1,175	31	59.1	− 1.2	83	26	31	8	41[a]	5.92	+ 2.01	1.60	0	9				s.	Neal Dodd.
Dutton	Madison		10	56.2	+ 0.1	84	15	26	8	43[a]	7.60	+ 2.59	2.75	0	13				s.	J. M. Ricketts.
Eldorado	Union	265	8	64.0		85	13†	39	3	37	8.54		2.34	0	13					J. J. Babb.
England	Lonoke		6	62.2		84	15	38	8	34[e]	10.87		2.80	0	12				s.	J. C. Chenault.
Eureka Springs	Carroll	1,465	10	60.4	+ 2.4	84	13†	31	8	37	7.20	+ 2.24	1.49	0	13	6	14	10	sw.	George W. Nichoalds.
Fayetteville	Washington	1,451	23	59.4	+ 0.6	81	24†	33	8	36	6.67	+ 2.28	1.62	0	14	9	14	7	sw.	University of Arkansas.
Fordyce	Dallas			64.6		85	15	38	3	35	8.58		2.14	0	13	7	10	13	s.	A. Tredick.
Fort Smith	Sebastian	481	30	62.0	+ 0.3	85	26	39	18	34	2.60	− 1.30	0.47	0	8	8	10	12	e.	U. S. Weather Bureau.
Frazier's Turnpike	Pulaski										11.18		2.45	0	12	5	8	17	s.	R. E. Brown.
Fulton	Hempstead	264	8								7.54		2.10	0	12					B. C. Logan.
Hardy	Sharp	643	14	60.2	+ 2.1	89	15	38	8	33	8.73	+ 4.71	3.90	0	16	2	13	15	sw.	C. A. Caywood.
Helena	Phillips	182	27																	B. F. Modisett.
Hot Springs	Garland	600	20	63.0	+ 0.5	90	15	37	6	38	11.86	+ 6.44	2.47	0	12	16	3	11	sw.	Army and Navy Gen. Hosp.
Huttig	Union	85	5	66.3		85	13	38	3	34	4.30		0.87	0	15	4	25	1		C. A. Berry.
Jonesboro	Craighead	345	17	63.4	+ 1.4	93	15	41	3†	44	9.19	+ 5.23	4.71	0	13	1	25	4	s.	Benedictine Sisters.
Junction	Union		19	67.2	+ 4.0	89	27	37	3	39	3.51	− 1.15	1.08	0	6	10	6	14	se.	J. A. Lowderback.
Lake Farm	Jefferson	195	5	63.0		83	13†	36	3	35	10.08		2.80	0	12	13	11	6	s.	R. H. Gillispie.
Lewisville	Lafayette	262	9	64.5[e]		88	15	39	3†	37[e]	5.56		0.89	0	11					F. W. Youmans.
Little Rock	Pulaski	357	33	62.8	+ 0.1	84	13	42	3	30	10.76	+ 6.25	2.28	0	15	9	10	11	e.	U. S. Weater Bureau.
Lutherville	Johnson	775	15	60.7	+ 1.7	88	15	34	8	34	5.40	+ 1.49	2.00	0	11	8	17	5	sw.	W. R. Hentchel.
Malvern	Hot Springs	277	25	62.8	+ 0.9	90	15	37	3	38	10.31	+ 6.22	3.10	0	14					Miss L. C. Smith.
Mammoth Spring	Fulton	512	8	59.9		89	15	32	8	46	8.51		2.27	0	15	8	13	9		F. Wallick.
Marked Tree	Poinsett	229	8																	L. Smith.
Mena	Polk	1,100	26	61.1	− 1.3	87	15	38	9†	37	8.27	+ 3.49	3.15	0	15	11	9	10	sw.	R. R. St. John.
Newport	Jackson	231	28	61.6	− 0.1	88	15	34	2	35[b]	6.61	+ 2.11	2.10	0	8					Charles Sprigg.
Ozark	Franklin	377	21																	R. M. Adams.
Pine Bluff	Jefferson	215	24	63.0	− 0.6	85	15	38	3	36	8.95	+ 4.35	3.00	0	12					J. M. Hudson.
Pocahontas	Randolph		20	61.6	+ 2.3	89	15	36	8	39	10.01	+ 5.86	2.50	0	15	11	9	10		Benedictine Sisters.
Pond	Benton	1,250	15	58.1	+ 2.2	81	30	29	8†	40	6.40	+ 2.72	1.97	T.	12	5	14	11	sw.	A. F. Stevens.
Portland	Ashley	122	3	64.8		84	13†	40	3	34	6.15		.85	0	13					T. A. Corson.
Prescott	Nevada	327	24	62.6	− 0.6	88	15	38	3†	40	7.67	+ 2.89	1.87	0	14					A. M. Ellsworth.
Rogers	Benton	1,385	21	58.5	+ 0.3	80	13†	31	8	45	6.27	+ 1.96	1.88	T.	11	10	8	12	s.	Carl A. Stark.
Springbank	Miller	182	4								7.87		1.23	0	14					G. Field.
Stuttgart	Arkansas	495	25	63.7	+ 1.1	82	11†	39	8	33	12.94	+ 8.65	3.16	0	16	13	7	10	sw.	H. A. Buerkle.
Subiaco	Logan	1,050	15	61.8	+ 1.1	88	15	38	18	38	3.60	+ 0.16	1.29	0	11	13	5	12	sw.	New Subiaco Abbey.
Swain	Newton	2,300		56.6		80	15	34	18	29	8.22		2.45	0	14	9	10	11	s.	George Paxton.
Texarkana	Miller	332	28	63.4	− 0.2	90	15	37	3	38	6.30	+ 2.05	1.15	0	10					D. E. Moore.
Warren	Bradley	304	17	64.1	+ 1.8	87	13	38	3	36	12.85	+ 7.85	2.35	0	13					W. J. Savage.
Whitecliffs	Little River	206	8								12.42		3.62	0	12					John E. Payton.
Wiggs	Garland		19	61.2	0.0	88	15	32	8	43	10.17	+ 5.70	2.17	0	16	9	13	8	sw.	S. D. Jester.
Wynne	Cross	250	4	60.8		83	15	34	8	33	7.59		1.66	0	11					John Seals.

TABLE 1.—*Climatological data for April, 1912. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Mississippi.																				
Anguilla	Sharkey	107	4	66.8	.....	85	28	40	3	30	11.73	.....	3.05	0	15	10	10	10	se.	E. W. Cook.
Austin	Tunica	200	16	63.6	+ 1.6	81	15†	40	10	33	10.84	+ 6.70	2.16	0	14	14	8	8	s.	H. J. Irvine.
Batesville	Panola	230	25	63.2	+ 1.4	87	14	38	3	36	9.61	+ 5.39	3.46	0	13	9	5	16	w.	J. M. Cox.
Big Creek	Calhoun	.....	.....	63.8	.....	84	11†	35	3	39	8.91	.....	3.76	0	9	.....	.....	.....	s.	J. P. Havens.
Byhalia	Marshall	390	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Tallahatchie Drainage Co.
Canton	Madison	228	22	66.6	+ 1.8	87	28	40	3	33	8.01	+ 3.89	2.30	0	14	4	19	7	se.	Dr. G. W. Smith-Vaniz.
Charleston	Tallahatchie	.....	2	66.8	.....	92	26	34	3	44	8.90	.....	2.20	0	14	11	6	13	s.	W. B. Burke.
Clarksdale	Coahoma	177	5	63.0	.....	83	11†	40	8†	35	8.25	.....	1.73	0	13	9	1	20	se.	A. C. Tuttle.
Cleveland	Bolivar	160	...	.....	.....	.....	.....	.....	.....	.....	9.73	.....	2.37	0	11	23	0	7	.....	W. W. Boone.
Coffeeville	Yalobusha	241	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Tallahatchie Drainage Co.
Corinth	Alcorn	470	24	61.8	+ 2.7	82	14	37	8	33	8.24	+ 3.36	1.84	0	14	10	2	18	se.	M. A. Candler.
Crenshaw	Panola	187	3	.....	.....	.....	.....	.....	.....	.....	9.11	.....	2.86	0	17	9	12	9	sw.	Tallahatchie Drainage Co.
Denmark	Lafayette	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Duck Hill	Montgomery	.....	13	63.4	+ 0.6	85	28	36	3	39	14.58	+ 9.63	4.47	0	15	11	11	8	s.	W. H. Eskridge.
Edwards	Hinds	222	25	66.4	+ 0.3	87	26†	40	3	34	10.79	+ 6.40	2.45	0	13	11	16	3	s.	E. F. Farr.
Enid	Tallahatchie	.....	3	.....	.....	.....	.....	.....	.....	.....	7.83	.....	2.20	0	8	.....	.....	.....	s.	Tallahatchie Drainage Co.
Fayette	Jefferson	279	10	67.3	+ 1.5	88	27	38	3	35	6.26	+ 0.18	1.98	0	9	12	11	7	s.	T. L. Darden.
Greenville	Washington	126	25	64.5	0.0	83	11†	39	3	33	9.29	+ 5.29	3.49	0	13	13	0	17	se.	F. L. Harbison.
Greenwood	Leflore	140	12	65.4	+ 2.4	86	28	40	3	35	16.51	+12.76	5.28	0	13	13	3	14	se.	J. H. Stephen.
Grenada	Grenada	194	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Tallahatchie Drainage Co.
Hernando	De Soto	391	24	62.6	+ 1.0	82	11†	38	8	35	10.82	.....	2.94	0	9	12	3	15	s.	W. F. Wood.
Hickory Flat	Benton	435	3	.....	.....	.....	.....	.....	.....	.....	5.47	.....	2.10	0	8	13	17	0	s.	Tallahatchie Drainage Co.
Holly Springs	Marshall	600	25	61.5	− 0.2	81	14	39	8	29	8.86	+ 3.96	2.58	0	12	11	2	17	se.	L. B. Mosby.
Kosciusko	Attala	430	22	64.4	+ 1.0	85	11†	38	3	35	10.10	+ 6.21	2.30	0	15	14	7	9	se.	E. L. Lucas.
Lake Cormorant	De Soto	206	3	.....	.....	.....	.....	.....	.....	.....	10.71	.....	3.15	0	15	7	17	6	nw.	Tallahatchie Drainage Co.
Lula	Coahoma	182	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Malone	Marshall	.....	3	.....	.....	.....	.....	.....	.....	.....	9.49	.....	2.58	0	12	.....	.....	.....	.....	Do.
Marks	Quitman	163	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Natchez	Adams	206	24	68.6	+ 1.2	90	27	40	3	32	7.78	+ 3.09	2.35	0	10	8	5	17	se.	F. L. Garrity.
New Albany	Union	398	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Tallahatchie Drainage Co.
Pontotoc	Pontotoc	475	23	62.4	+ 0.4	82	14	39	3	33	10.92	+ 7.22	2.00	0	15	5	20	5	se.	Dr. C. W. Bolton.
Port Gibson	Claiborne	116	24	66.4	+ 0.9	89	27	42	3†	35	9.18	+ 4.76	4.11	0	13	6	5	19	e.	H. H. Crisler.
Rosedale	Bolivar	143	4	62.6	.....	85	24	41	3	36	9.63	.....	2.05	0	11	12	3	15	sw.	T. J. Murray.
Senatobia	Tate	284	3	.....	.....	.....	.....	.....	.....	.....	7.79	.....	2.26	0	12	10	2	18	n.	Tallahatchie Drainage Co.
Shoccoe	Madison	.....	9	65.4	.....	87	11	37	3	34	8.83	+ 4.77	3.50	0	13	18	6	6	s.	J. C. Pitchford.
Suffolk	Franklin	.....	11	68.3	+ 3.0	87	27	39	3	34	7.33	+ 3.09	2.37	0	13	12	10	8	s.	Prof. Geo. H. Kent.
Swan Lake	Tallahatchie	148	7	.....	.....	.....	.....	.....	.....	.....	7.46	.....	1.74	0	10	13	5	12	ne.	W. J. Hawkins.
Tchula	Holmes	130	7	67.0	.....	86	28	43	3	31	9.53	.....	3.40	0	13	6	19	5	e.	Dr. M. P. Winkler.
University	Lafayette	502	19	64.1	+ 1.6	85	21	38	3	35	8.18	+ 3.90	3.70	0	13	.....	.....	.....	s.	Prof. J. H. Dorroh.
Utica	Hinds	287	8	66.2	.....	87	27	39	3	33	10.46	.....	2.35	0	11	.....	.....	.....	.....	Dr. J. B. Dudley.
Vicksburg	Warren	247	41	66.0	+ 0.8	84	27	46	3	26	9.71	+ 4.55	2.36	0	13	9	9	12	se.	U. S. Weather Bureau.
Water Valley	Yalobusha	300	23	64.1	+ 0.8	84	11†	37	3	37	7.27	+ 2.52	2.20	0	9	14	8	8	se.	Miss Louise Erikson.
Woodville	Wilkinson	560	19	68.1	+ 1.4	86	27	41	3	31	8.39	+ 3.36	3.15	0	11	15	12	3	sw.	James D. Lee.
Yazoo City	Yazoo	116	18	66.6	+ 1.4	87	28	39	3	34	11.59	+ 7.27	2.00	0	14	15	4	11	se.	W. H. Courts.
Louisiana.																				
Abbeville	Vermilion	18	24	70.3	+ 1.4	85	22†	44	3	29	3.98	− 0.25	1.25	0	12	11	9	10	se.	C. J. Edwards.
Alexandria	Rapides	77	24	69.0	+ 1.9	91	27	42	3†	38	6.95	+ 2.40	3.23	0	7	9	3	18	n.	Neille Graham.
Amite	Tangipahoa	130	24	69.1	+ 1.9	86	27	43	3	32	15.47	+10.28	5.80	0	12	6	22	2	s.	Lulu M. Wentz.
Antioch	Claiborne	.....	...	66.1	.....	89	27	37	2	38[a]	6.99	.....	2.00	0	10	15	0	15	s.	W. L. Anglin.
Avoca Island	St. Mary	.....	1	.....	.....	.....	.....	.....	.....	.....	4.60	.....	1.80	0	5	.....	.....	.....	.....	J. N. Pharr & Sons (Ltd.).
Baton Rouge	East Baton Rouge	60	24	69.6	+ 2.3	86	27	45	3	29	8.48	+ 3.85	4.05	0	12	9	0	21	se.	Elmo M. Bott.
Burnside	Ascension	20	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. S. McFarland.
Burrwood	Plaquemines	1	24	68.6	+ 0.6	81	28	53	4	18	2.06	− 1.32	1.30	0	4	9	15	6	se.	Graham Meyers.
Cades	St. Martin	.....	2	70.2[d]	.....	86	27	45	3	31[d]	4.96	.....	2.06	0	9	12	7	11	s.	C. E. Smedes.
Calhoun	Ouachita	180	24	66.2	+ 2.1	89	27	36	3	40	6.94	+ 2.41	2.25	0	13	7	12	11	.....	North Louisiana Expt. Sta.
Cameron	Cameron	6	19	65.4	− 3.7	85	22	39	3	33[d]	3.87	+ 0.40	1.60	0	7	5	13	12	se.	Adolph Bruckert.
Carrollton	Orleans	7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Loyola College.
Cheneyville	Rapides	67	24	68.3	− 0.1	90	14†	42	5	38	5.85	+ 1.09	1.65	0	9	8	5	17	s.	Walter I. Tanner.
Cinclare	West Baton Rouge	.....	2	69.8	.....	87	27	44	2	30	9.15	.....	3.60	0	9	9	3	18	se.	Cinclare Central Factory.
Clinton	East Feliciana	113	24	68.9	+ 1.6	86	27	43	3	30	6.96	+ 2.01	2.90	0	12	7	4	19	s.	John A. White.
Collinston	Morehouse	65	11	67.2	+ 2.5	89	27	38	3	39	8.19	+ 3.53	3.20	0	14	5	4	21	s.	John B. Reily.
Columbia	Caldwell	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. W. Blanks.
Covington	St. Tammany	39	20	69.3	+ 1.3	89	22†	44	4	36	15.74	+11.42	4.00	0	15	6	0	24	s.	Cecile P. Champagne.
Dodson	Winn	.....	3	66.9	.....	89	13	37	3	37	7.02	.....	1.66	0	10	5	14	11	se.	J. P. Lucas.
Donaldsonville	Ascension	33	24	70.4	+ 2.2	88	25†	45	3	33	7.61	+ 3.29	2.00	0	10	10	13	7	s.	John F. Park.
Dutchtown	....do	.....	1	.....	.....	.....	.....	.....	.....	.....	7.01	.....	1.92	0	12	13	1	16	.....	Picard & Geismar (Ltd.).
Farmerville	Union	177	24	64.0	− 0.9	86	12	37	2	36	5.36	+ 0.11	1.06	0	11	13	7	10	s.	W. P. Chandler.
Ferriday	Concordia	.....	5	62.1	.....	85	30	40	7	28	6.77	.....	2.50	0	8	.....	.....	.....	.....	C. L. Achor.
Franklin	St. Mary	10	20	71.4	+ 2.5	90	29	47	4	33	2.19	− 2.13	0.56	0	11	7	6	17	ne.	J. M. Bonney.
Franklinton	Washington	.....	2	68.6	.....	88	29	43	3†	34	17.90	.....	5.80	0	12	6	20	4	.....	D. A. Self.
Grand Cane	De Soto	302	18	64.7	+ 0.3	85	14†	32	3	41	4.58	0.00	1.27	0	10	8	6	16	s.	G. Foster Provost.
Grand Coteau	St. Landry	93	24	69.8	+ 1.4	87	14†	44	4	33	5.33	+ 1.13	2.35	0	8	14	11	5	sw.	St. Charles College.
Hammond	Tangipahoa	44	20	68.8	+ 1.5	87	29	44	4	32	8.15	+ 3.65	2.65	0	11	21	4	5	se.	C. C. Carr.
Houma	Terrebonne	.....	24	.....	.....	.....	.....	44	4	.....	2.30	− 1.82	0.95	0	8	19	0	11	se.	J. M. Foote.
Jena	La Salle	.....	1	67.5	.....	89	27	37	3	38	4.28	.....	1.20	0	8	10	13	7	se.	C. E. Wilbanks.
Jennings	Calcasieu	30	15	69.9	+ 2.7	89	14	43	3	36	4.67	+ 1.04	1.74	0	8	7	10	13	se.	J. F. Buch.
Laark	Morehouse	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. M. Donley.
Lafayette	Lafayette	36	24	70.3	+ 2.2	89	14†	44	3	31	4.58	+ 0.64	1.75	0	13	9	0	21	e.	J. J. Davidson.
Lake Charles	Calcasieu	22	24	65.2	− 2.2	88	14	39	3	37	6.90	+ 3.81	2.00	0	8	8	9	13	s.	George Boudreaux.
Lakeside	Cameron	9	1	69.2	+ 1.4	86	30	49	1†	26	6.99	+ 3.33	2.96	0	6	12	4	14	se.	L. J Nunemacher.
La Rose (near)	La Fourche	.....	1	70.0	.....	86	22	48	4	27	4.97	.....	2.20	0	11	16	12	2	se	Louisiana Delta Farms Co
Lawrence	Plaquemines	6	21	70.6	+ 2.4	90	27	47	4	30	8.37	+ 4.93	2.45	0	11	13	7	10	s.	H. C. Warmoth.
Leesville	Vernon	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. M. McFarland.
Liberty Hill	Bienville	.....	24	67.6	+ 1.6	92	13	35	3	42	6.00	+ 1.60	2.50	0	11	10	4	16	s.	E. A. Crawford.
Logansport	De Soto	192	8	.....	.....	.....	.....	.....	.....	.....	2.68	.....	0.84	0	7	13	7	10	s.	Bettie M. Dennis.
Melville	St. Mary	45	24	68.9	+ 0.9	90	28	41	4	35	4.63	− 0.57	2.04	0	10	12	3	15	ne.	Charles B. McNeill.
Merryville	Calcasieu	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. P. Windham.
Minden	Webster	194	24	64.4	− 0.8	89	27	34	3	42	6.95	+ 3.22	1.48	0	12	6	16	8	e.	Ethel Fort.
Monroe	Ouachita	82	24	66.1	+ 0.2	86	27	45	3	30	8.61	+ 4.29	1.85	0	14	7	3	20	se.	L. L. Smith.
Morgan City	St. Mary	14	6	.....	.....	.....	.....	.....	.....	.....	1.03	.....	0.27	0	8	6	3	21	se.	Virgil E. Kinsey.
Newellton	Tensas	.....	5	67.2	.....	90	27	40	3	33	13.17	.....	4.06	0	11	.....	.....	.....	.....	John D. Fultz.
New Iberia	Iberia	15	24	71.4	+ 2.9	85	22†	46	3	26	4.61	+ 0.10	1.40	0	10	7	10	13	sw.	Mrs. John A. Gebert.

TABLE 1.—*Climatological data for April 1912. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days. 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Louisiana—Continued.																				
New Orleans (1)	Orleans	51	41	70.4	+ 0.5	86	29	51	3	25	8.62	+ 3.71	1.69	0	16	3	6	21	s.	U. S. Weather Bureau.
New Orleans (2)	do	18	24	71.2	+ 2.8	88	20†	44	4	35	9.19	+ 4.80	2.77	0	13	4	8	18	s.	Sugar Experiment Sta.
Opelousas	St. Landry	83	20	70.0	+ 2.1	91	14†	41	3	38	4.72	+ 0.06	2.84	0	9	9	0	21	s.	Andrew Moresi.
Paradis	St. Charles		1								3.34		1.17	0	9					R. E. Boyce.
Pearl River	St. Tammany	29	6								23.43		7.50	0	13	13	3	14	e.	George F. Bancks.
Plain Dealing	Bossier	208	20	64.8	+ 0.6	86	27	36	3	40a	5.69	+ 1.06	1.69	0	12	9	4	17	se.	Leon Sanders.
Rayne	Arcadia	44	20	70.9	+ 2.3	87	14†	44	3	30	4.55	+ 1.05	1.60	0	10	7	1	22	s.	A. P. McNeil.
Reserve	St. John Baptist		11	69.6	+ 2.5	90	26	46	4	34	7.96	+ 4.10	3.22	0	12	8	11	11		Leon Godchaux Co. (Ltd.).
Richland Plantation	Rapides																			A. B. Pendleton.
Robeline	Natchitoches	147	16	65.3	+ 0.7	89	13†	35	3	41	6.90	+ 2.21	1.75	0	9	6	19	5	s.	Ruby McCook.
Ruston	Lincoln	312	17																	R. A. Clampet.
St. Francisville	West Feliciana	115	9	70.1		86	22†	48	17	31	10.85		4.13	0	4	6	12	12	s.	L. P. Kilbourne.
Schriever	Terrebonne	17	20	71.7	+ 3.4	91	28	45	4	40	3.14	− 0.57	1.30	0	10	9	5	16	w.	Harriet F. Riviere.
Shreveport	Caddo	249	41	66.0	+ 0.2	85	14	45	3	26	7.49	+ 2.91	1.97	0	12	7	7	16	se.	U. S. Weather Bureau.
Simmesport	Avoyelles	42	6								4.55		1.27	0	12	4	0	26	ne.	C. T. Leigh.
Southern Univ. Farm	Jefferson		15								10.81	+ 6.08	2.90	0	13	11	3	16	se.	F. L. St. Martin.
Sugartown	Calcasieu		19	69.0	+ 2.0	86	27	42	2	28	4.59	− 0.06	2.12	0	5	6	11	13		G. W. Richardson.
Tallulah	Madison	91	5					40	3		12.22		2.45	0	13					Neal T. Halt.
Walker	Livingston		2	69.0		86	25†	44	2†	35a	7.58		3.33	0	9	8	11	11	ne.	H. C. Fondren.
Winnsboro	Franklin																			J. C. Carlton.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 7, Lower Mississippi Valley.*

Stations.	Watershed.	Day of month.																												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Colorado.																																
Buena Vista	Arkansas												T.			T.	.15	T.	T.	T.	.15					T.		T.			0.30
Calhan	Big Sandy																															
Canon City‖	Arkansas	.02	T.									T.					.13		.62	.24		.16							.02			1.19
Colorado Springs	Fountain	.01							.01		T.			.01			T.	.05	.70	T.	.63	.05					.04	.01	.05			1.56
Cripple Creek	Oil Creek	T.							.03		T.			T.	.02	T.		.02	.47	.03	.03	.02	.27			T.		T.	.30			1.19
Cuchara Camps	Cucharas	1.19				.03	.21				.14		.06	T.	.36	.24	.72	.27	T.	T.		T.				T.			1.36			4.58
Eads	Big Sandy	T.																														T.
Fairview	St. Charles	1.10						.30							.16					1.75						.10		.31				3.72
Fremont Experiment Station.‖	Fountain	T.				T.			T.		T.	T.	.01		T.	T.	.04	.06	.90	.02		.31	T.			T.	.09	.13				1.56
Garfield	Little Arkansas										.06		.09	.19			.12	.09	.03		.25					.13		.04				1.00
Hamps	Big Sandy	T.												.07				.05	.65			.04							.32			1.13
Hermit Lake	Grape Creek	.65					.17			.55			.60	.82	.85		.75		.51	.72	.36	.19			.22		.92					7.64
Hoehne (near)	Purgatoire	.15					.10										T.	.10	.22								T.		.83			1.40
Holly	Arkansas	.30																	.15	T.								.17	.31			0.93
La Junta	do	.15															T.		.27	.02		.05							.09			0.58
Lake Moraine	Fountain	.04							.04		.06		T.	.12		.04	.22	.31	.53		.06	.29	.19			T.		.05	.28			2.23
Lamar	Arkansas	.75						.40																								1.15
Las Animas	do																															
La Veta Pass	Cucharas											.21				.22	T.	.29	.37		T.				T.			T.	.38			1.47
Leadville	Arkansas	.01				T.	.01				T.		T.	.19	.04	T.	T.	.01	.01	.03	.01	T.	.01	.13		.05	.12	T.	T.				0.62
Limon (near)	Big Sandy																.15		.60		.10	.20				T.			.35			1.40
Madrid	Purgatoire	.05					.04				T.						.25	.27	.19										.57			1.37
Marshall Pass	Arkansas					.24									.17		.22			.18	.35		.17									1.33
Monument	Fountain								.13				T.					.54				.22					.08	.20				1.17
North Lake	Purgatoire	.18				.06	.04									.56	.31	.30	.27	.39	.24								.70			3.05
Oro	Arkansas																															
Pueblo	do	.09									T.						.44	.04	.25	.16		.21				T.	T.	.02				1.21
Rocky Ford (near)	do																															
St. Elmo	Chalk Creek					T.	T.				.09		.06	.04		T.	.06	.04		.06	.06	.07	T.			.20		T.				0.68
Salida‖	Arkansas	.24					T.					.08		T.			.08															0.40
Santa Clara	Huerfano	.26					.10		T.		T.					.19	.02	.63	.29	.05	T.	T.	T.			T.			.62			2.16
Sheridan Lake	Arkansas																															
Stonewall	Purgatoire	T.					.13				T.					.44	T.	.22	.05										.44			1.28
Trinidad	do	.13					.04				T.					T.	.24		.16			T.			T.		T.		.75			1.32
Two Buttes	Arkansas																															
Victor (near)	Oil Creek							T.			T.		T.					.30	T.	T.			.20		T.			T.				0.50
Vilas	Cimmaron	T.																	.30						.28			T.	1.72			2.30
Wayne	Arkansas																	T.	.36	.74							T.					1.10
Westcliffe	Grape Creek										.10		.10				.03	.65	.33				T.						.27			1.48
Winfield	Clear Creek	T.			T.	.03	T.				.01		.03	.01		T.		.02	T.	.03	.06	T.	T.			.01	T.	.05	T.			0.25
Woodman Sanatorium.	Fountain								T.		T.			T.		T.	T.	.01	.80	T.	T.	.20						.26				1.27
Wortman	Arkansas	T.			T.	T.	T.			T.	.10	T.	T.	.30	T.	.10	T.	T.	.10	.10	.15	T.	.10	.10	T.	T.	T.	T.	T.	.20	T.		1.25
New Mexico.																																
Abbott	Canadian	.32																	.21						.07			.13				0.73
Albert	do																.15	.35	.48						.28							1.26
Aurora	do	.09					.07		.18					.07		.05	.32	.06	.21		.01							.01	.08			1.15
Bell Ranch	do	.14				.22			.04								.09	T.	.04						.29							0.82
Black Lake	do	.02											.01			.09	.01	.08	.18													0.39
Cabeza	do	.07				.80			T.								.17		T.						*	1.20		*	.10			2.34
Campana	do	.04				.22			.04							T.	.09	.18	.08						.22				.08			0.95
Chacon	do						.10						10	.48		.33	.10	.05	.20													1.36
Cimarron (near)	do						.05										.02	.02	T.									.58				0.67
Clayton	do																															
Clovis	Red																															
Cuervo	Canadian	T.				T.													.30									T.				0.30
Dawson	do	T.				T.											T.	T.	.80		T.							.50				1.30
Elizabethtown	do						.12		.05								.09	.15	.03	T.									.04			0.48
Folsom	Dry Cimarron	.20					.04									T.	.28	.02	.55	.08		T.							.87			2.04
Fort Union	Canadian	.16				T.	.05		.16								.15	.05	T.						T.			.10				0.67
Hayden	do	.05				.12			.02								.10	T.	.17						1.08				1.23			2.77
Hoosier Ranch	do	.10		T.					.04								.16	.03							.23							0.56
Johnsons Park	do	T.	.18			.02					.17						.29	.40	.14		T.								.95			2.15
Kappus	do	.30					.25			T.						T.			.10		.07					T.		.07				0.79
Lake Alice	do	.56																.50	*	.50									1.30			2.86
Logan	do	.30															T.		.18										.50			0.98
Lykins (near)	Red					.40											.33	.17														0.90
Maxwell (near)	Canadian																.06	.25	.13									.46				0.90
Melrose	Red						.27											.23	.03														0.53
Miami Ranch	Canadian																.05	.10	.04										.57			0.76
Mills (near)	do	.20				.22	T.		.05								.21	.14	.10						.07				.07			1.06
Montoya	do	T.				.25			T.							T.	T.	T.	T.										.20			0.45
Mount Dora (near)	do	.45				T.											T.	*	.40						.15				1.20			2.20
Nara Visa	do	.20					.20		T.									.01	.48	.02					.10				.30			1.31
Ocate	do																															
Optimo	do																															
Palo Verde	do	.15				.05	T.		.04								.03	T.	.07						.34				.10			0.78
Pasamonte	do	.18																.52	.13						.25				.50			1.58
Pleasant View	do	.25				.06			.04								.27	.22	.15						.17				.18			1.34
Portales	Red																															
Raton	Canadian	.48															.55	.15	.25									1.20				2.63
Rociada	do	.16					.18		.20								.10															0.64
Rosebud	do	.08				.20											.12	T.	T.							1.33			1.56			3.29
Roy	do	.25				.08		T.								.10	T.	T.	T.						.45				.10			0.98
Roy (near)	do	.18				T.											.10	T.	T.						.36		T.					0.64
San Jon	do	.15					.05		T.								.28	T.	.13						.10	T.			.32			1.03
Solano	do	.28				.11		.05									.09		.05						.32							0.90
Springer	do	.02						.01										T.	T.										.10			0.13
Taylor	do	.04							T.		T.								.10							T.			.42			0.56
Trementina	do	T.				.25			.12								.15		.05		.03			.02					.06			0.68
Tucumcari	do	.20				.38											.09		.05						.02				.27			1.01
Valley	Dry Cimarron																	*	.45		.15				T.			*	1.00			1.60
Vance (near)	Canadian	.16				.09			T.								.07		.50	.11					.55	.04			1.02			2.54
Vermejo Park	do	.14						T.		.26		T.	.22				T.											.08				0.70
Wagon Mound (near)	do	.20					.02				.01						.20	.05	.10						.02				.40			1.60

TABLE 2.—*Daily precipitation for April, 1912. District No. 7*—Continued.

Stations.	Watershed.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Texas.																																
Amarillo	Canadian	.10				.19	.01		.04			T.					.13	.02	.10	T.					.11			.02	T.			0.72
Archer City	Red	T.					T.			T.	T.						.32		.02	.15						T.			.49			0.98
Arthur City ‖	do		1.20									.90							.20	.10									.65	.30		3.35
Bonham	do	1.54					.37			.30			1.53				.63			.14									.73			5.24
Canadian	Canadian	.57	.03																.22	.19						.19	.87	.20				2.27
Childress	Red											T.				.45	.20		.48									.30				1.43
Chillicothe	do											1.01					.13											.68				1.82
Clarendon ‖	do	.41	.04				.06										.18		.28	.07						.41			.66	.03		2.14
Clarksville	do	.48					.57			.27		.40							.18									1.46				3.36
Claude	do								T.									T.	T.						.50			1.10				1.60
Dalhart ‖	Canadian	.23					.19		.03								.16	.12	T.	.39						.63		.63	.17	.01		2.56
Denison ‖	Red	1.70	.15					.30			.35		1.60				.70	.50		.10	.10								.80	.06		6.36
Finley ‖	do						T.	.63			.50		1.22					.30					.60				T.	.30		1.30		4.85
Henrietta ‖	do	.10											1.00				.50			.25									.49			2.34
Hereford	do																															
Memphis	do															.40												.45	.17			1.02
Miami	Canadian	.30	T.				T.		T.		T.						T.	T.	.07	.44								T.				0.81
Mobeetie	Red																															
Ochiltree	Canadian																															
Panhandle	do																															
Paris ‖	Red	1.07	1.20				T.	.67			.39	T.	1.75			T.	.01	.13		.36	.06	T.					.05	T.	.30	.40		6.39
Plemons	Canadian	.64					.08		.02								T.	T.	.26	.46						.75		.01				2.22
Quanah ‖	Red	.35											.90				.25	T.		T.									T.			1.50
Ringo Crossing ‖	do	.32									.52		1.65				1.62	.42												.55		5.08
Romero	Canadian	.15					.23											T.	.27						.03	.02			.25			0.95
Sherman ‖	Red																															
Stratford	Canadian	.17					.05		.03									.02	.48	.38						.39		.11	.02			1.65
Texline	do	.30																	1.90													2.20
Tulia	Red	.11					.16		.26							.20	T.	T.	.21	T.					T.			.12	T.			1.06
Wellington	do	.35						.06				.18		.23						.02		.31						T.			.65	1.80
Wichita Falls	do	.59				T.						T.	.70			.30	.09		T.							.05			.42			2.15
Winfield	do	.71					1.85			.72			1.20			.73			.04			T.				T.	1.08		.78			7.11
Kansas.																																
Alden	Arkansas	.54																														0.54
Anthony	do	.75	.44							.01			T.	.24						.37	.02					.57		.21	.68			3.29
Ashland	Cimarron	1.01	.11						.01										.12	.12	.09					.30			.04	T.		1.80
Burlington	Neosho	.79	.35														.17					.15				.47			1.45	.54		3.92
Chanute	do	.61	.79														T.	.42	.20	T.	.46					.82	.64	T.	1.45	.42		5.81
Cimarron	Cimarron	.02					T.		T.										.09	.02						.01		.37	2.77			3.28
Coffeyville	Verdigris																.14	.23		.06		.90		.10	.16	.50	.11	4.02	.88			7.10
Coldwater	Cimarron	.98	.18									T.		.02					T.	.25	.05					.25			.04			1.77
Columbus	Neosho	.26	.61				.08			T.	T.		T.	T.			.20	.25		.21	T.	.85				1.28		2.60	.53			6.87
Coolidge	Arkansas	.42																	.11	.36									.30			1.19
Cottonwood Falls	Neosho	.95	.10											.52						T.	T.				.05				.91	.44		2.97
Council Grove	do	.19	.02								.02			.13						.13	.11	.05					.08	.16	.20	.06		1.15
Cunningham	Arkansas	.95	.50							T.										.22	.80					.18		T.	.16			2.81
Dodge City	do	.05					T.		T.		T.			T.					.09	.02	T.					.03		.68	.86			1.73
El Dorado	do	.72	.36											.50						.06	T.			.03		.37		.37	2.21	.50		5.12
Ellinwood	do	.31	.01				T.		T.				.01	T.						T.	.51					.02			1.21	.02		2.09
Emporia ‖	Neosho	.71	.18							T.				.12											T.	.23			.72	.08		2.04
Eureka	Verdigris	.73	.32								T.									.12		.01		T.		.50		.40	1.03	3.20		6.31
Fall River	do	.50	.55										.05	T.							T.	.25		.02	.65		.35	.35	2.15	.35		5.22
Fargo	Cimarron						T.		T.										.21	T.	T.							1.56	.80			2.57
Fredonia	Verdigris	.48	.44								T.	T.					T.	.26		T.	T.	.26		T.		.60	.94	T.	2.30	.09		5.37
Garden City	Arkansas	T.					T.				T.						T.		.11	T.						T.		.18	2.07	T.		2.36
Great Bend ‖	do	.80	.30																			.30							T.	.93		2.33
Greensburg	do	.75					T.				T.	T.		.05					.01	.04	T.					.10						0.95
Grenola	Verdigris	.57	.30										.18	T.						.09	T.	.50		.03		1.73		.50	1.45	.15		5.50
Hess	Cimarron	.11					T.		T.										.11	T.	T.					.10		.10	1.45			1.87
Howard	Verdigris	.89	.35								T.	T.	.31					T.		.07		.31		.07		.62	.64	.22	1.72	.32		5.52
Hugoton	Cimarron	.10					T.		T.										.35	.11	.03					.28		1.92	.28			3.07
Hutchinson	Arkansas	.96	.14											.08						.02	.32					.11		.17	.27			2.07
Independence	Verdigris	.80	.81				T.						.03				.04	.28		.26	T.	.12		.07		.50	1.71	.43	3.43			8.48
Iola	Neosho	.77	.22			T.					T.	.04	T.				.30	.04		.07	.26			.02		.63		.79	2.54	.02		5.70
Irene	Arkansas	.44																	.20	.25						T.		T.	1.05			1.94
Jetmore	do	.03							.02										T.									.14	2.63			2.82
Kingman	do	.80	.30											.15						.08	.10					.15		.20	.12	.04		1.94
La Crosse	do	T.					T.		T.												T.							T.	1.14			1.14
Lakin	do	T.																	.20							.06		.40	1.55			2.21
Larned	do	.03					T.														.06	T.							1.34			1.43
Lebo	Neosho	.40	.15								T.	T.						T.		T.	T.			T.		.38		.24	.60			1.86
Le Roy ‖	do	.52	.52									T.	T.					.27			T.	.37			.04	.38	.26		1.62	.53		4.51
Liberal	Cimarron	.26							T.					T.					.30	.10	.06					.35		.19	.13			1.39
Macksville ‖	Arkansas	.35	.43							T.		T.		.10							.06	T.				.07				.15		1.16
McPherson ‖	do	.58											.04	.05								.86				.04	.23		.12	.03		1.95
Madison	Verdigris	.92	.25																	.21	T.			T.		.49		T.	1.04	.18		3.09
Marion	Neosho	.60	.07										.01	.05						T.	.07			.02		.03		.20	.16	.05		1.26
Medicine Lodge	Arkansas	1.06	.78											.12					T.	.23	.34					.26		.02	.40			3.81
Medora ‖	do	.79	.05												.01						T.	1.03				.06	.08	.12	.08			2.22
Mount Hope	Arkansas	.85	.27									.18														.28		.32	.40			2.30
Neosho Rapids ‖	Neosho	.70	.20																			T.				.30	.02		.80	.12		2.14
Ness City	Arkansas																											.72	1.38			2.10
Newton	do	1.00	.26																		.18					.14		.36	.18			2.12
Norwich	do	.89	.28							T.		T.	T.	.12						.12	.18			T.		.23		.34	1.20	.17		3.53
Oswego	Neosho	.30	.63				.13										.11	.29		.25	.37			.03		.97	.06		2.77	.50		6.41
Plains	Cimarron	.50							T.	T.	T.								.20	.04	.10					.30		.51	.23			1.88
Pratt	Arkansas	1.00	.45																	.17						.14		T.	.31	T.		2.07
Richfield	Cimarron	.05																	.16	.05						.30		.74	1.58			2.88
Rome	Arkansas	.55	.40										.44	.76						.32	.09			T.		1.16		.30	1.33			5.35
Sedan	Verdigris	.90	.45										T.					.06		.15	.12	.20			.05	.54	1.34		3.24	.38		7.43
Toronto	do	.37	.98									T.	T.									.20				.12	1.25		2.05	.80		5.77
Ulysses	Cimarron	.10					T.												.15						.30			.25	1.50			2.30
Walnut	Neosho	.41	.99				T.			T.	T.	T.					.10	.36	T.	.14		.60		1.02		1.11	1.01	T.	3.34	.36		8.44
Wellington	Arkansas	.63	.38								T.		.06	.22						.33	.03	T.		.06		.88		.22	.90	.15		3.86
Wichita	do	.84	T.						T.		T.	T.	.02	.19						.07	.02			.06		.19		.38	2.10			3.87
Winfield	do	.61									T.			.18						.16	.88			.05		2.19		.32	1.53			5.92
Yates Center	Verdigris	.51	.20									.09	.06			T.	.13		.09	T.	.21		.06		1.30		.62	1.56	.43			5.26

TABLE 2.—*Daily precipitation for April, 1912. District No. 7*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Oklahoma.																																
Ada	Canadian	.65					.30			.14	.01		.35	.02			.39			.34						1.57			.82			4.59
Alva	Arkansas	.10	1.00						T.	T.	T.	T.	T.	.01						.50	T.					.30	T.	T.	.50			2.41
Apache	Red	.45											.23	.03			.40			.27	T.					.15			.54			2.07
Arapaho	Washita	.70	.05																	.22								.18	1.43			2.58
Ardmore ||	Red	1.60	.12							.07	.09	.02	.55				.13	.12		.15							.74		.67			4.26
Arnett	Canadian																															
Bartlesville	Arkansas	.75					.10			T.		T.					.15	.01			.38	1.00				1.05		2.50	2.60	.15		8.69
Beaver	Canadian	.76	.05						T.			.25							.20		.15					.28						1.69
Blackburn	Arkansas	.67	.20									T.		.06			.02			.53	.02	.28				.38		1.50	4.70			8.36
Cache	Red	.30											.32				.22			.12						.02						0.98
Calvin	Canadian	.90	.22					.42		.04	.05		.15	.05			.65			.40						.18	3.11		.73			6.90
Chandler ||	do																															
Chattanooga	Red	.37											.18			.75				.11	T.								.50			1.91
Chickasha	Washita																															
Cloud Chief	do	.32					T.		T.					.30			T.			.31		T.					1.65	1.02				3.60
Crawford	Canadian											.60							.20	.70						.30		1.20				3.60
Durant	Red	1.25	.15					.28			.24		.40				.17	.13		.15							T.		.83			3.60
Eldorado	do	.50				T.			T.			T.	.39				.30			.03								T.	.65			1.87
Elk City	do	.50	.10																							.40		3.04				4.64
El Reno	Canadian	.45											.03	.02					.02	.65	.37					T.		.80	1.85			4.19
Enid ||	Cimarron	.30	.15																	.49		.15				.62	T.		8.30			10.01
Erick	Red																															
Eufaula	Canadian	.47					.34			.10	T.			T.			.82			.08						3.73			.58			6.12
Fairland	Arkansas	.31	.18			.32			T.	T.							.05	.25		.65		.44				1.22		T.	2.28	.51		6.21
Fort Gibson	do	1.05	.45					.37			.13		T.	T.	T.		.45	.13	.28	.09		T.				.09	.42		.85	.25	T.	4.56
Frederick	Red	.51					T.						.45				.16				T.								.25			1.37
Geary	Canadian	.34	.00										.15	.09					.04	.29						.04		1.54	1.57			4.12
Goodwell	do	.40																		.20	.40					.32			T.			1.32
Guthrie	Cimarron	.30											.22	T.			.05			.40	T.					.08		.90	2.85			4.80
Guymon	Canadian	.37																.10	.25	.60					.28			.10				1.70
Hartshorne	do	.50	.05					.26					.15	.05			.12			.30						.10	.09		.65			2.27
Healdton	Red	.17					.14			.10	.11		1.02	.19			.95		T.	T.						2.05		T.	.71			5.44
Helena	Cimarron	1.05	.45										.25	T.						.20	.02					.93		.45	.70			4.05
Hennessey	do	.50										T.	T.								.50					.13		1.00	2.25			4.38
Hobart	Red	.32					.03						.15				T.			.26								3.18	1.08			5.02
Holdenville ||	Canadian	1.08	.16					.12			.18		.15				.30			.39						.50	1.32		.73			4.93
Hooker	do	.26																	.15	.11	.59					.27		.27	T.			1.65
Hurley	Cimarron	T.																							.12				.66			0.78
Idabel	Red																															
Jefferson	Arkansas	.09	.37							T.	T.		.04	.03						.29						1.48		.28	1.22			4.40
Kenton	Cimarron	.20					.03										.02	.05	.26	.14						.01		T.	.39			1.10
Kingfisher	do	.62	.10				.01			.01	.02		.09	.06			.01		.07	.51						.20		1.01	1.96			4.67
Lawton	Red	.54				.01			T.				.30	.02			1.02			.16	T.							T.	.55			2.60
McAlester	Canadian	1.23					T.	.42		.11	.07	T.	.12	.04			.47		.01	.39						.81			.91			4.58
Mangum ||	Red						.05				T.	T.	.12				.11		T.	.15									5.22			5.65
Marlow ||	Washita	.75				T.				T.	T.		.50	.04			.96	.14		.28	T.	T.				1.10	.06	.51				4.34
May	Canadian	1.10																	.01						.26				.90			2.27
Meeker	do	1.00					.47										.40		.30							.25			1.32			3.74
Muskogee	Arkansas	1.06					.29			T.							.54			.35						.77			1.40			4.41
Mutual	Canadian	.64																	.12									1.29	.25			2.30
Neola	Washita					T.							.26	.04			.04	.01		.41	T.		.02			.05		.02	1.70			2.55
Newkirk	Arkansas	1.10	.35												T.					.35		.85				1.05	.10	.30	2.10	.15		6.35
Norman	Canadian	.55					.15			T.	T.		.13	.01			.66		T.	.30	T.					.12		.01	.55			2.48
North Muskogee	Arkansas		.92	.26	.22			.22									.62			.20							1.11		.82	.10		4.47
Oakwood	Canadian	.76	.11											.15			.04	.10		.49	.06					.10		.30	3.15			5.26
Okeene	Cimarron	.45	.10									T.	T.	.02				.02	.03	.71	.23					.10		.99	3.85			6.50
Oklahoma	Canadian	.18	T.				T.			T.	T.		.59	T.			.03		.21	.51	T.				T.	.22		.03	1.04			2.81
Okmulgee	do						.25			T.							.60			.30						.75			.93			2.83
Pauls Valley	Washita																															
Pawhuska	Arkansas	.65															T.	T.		.24		.64				.82		1.68	4.35	.44		8.52
Perry	do	.60	.18				T.			T.	T.			.11			T.		T.	.25	.07			T.		.08		7.03	.03			8.35
Rankin	Red																															
Ravia	Washita						.06						.53			.48				.25						.10						1.42
Sac and Fox Agency	Canadian	.60	.04				.48										.30			.50						.45		1.70				4.07
Shawnee ||	do	1.25	.08					.51		T.	.02		.22	.02			.43	.03		.35						T.	.11		.80	.10		3.92
Snyder	Red	.62											.56				.22			.28						.15		T.	.36			2.19
Stillwater ||	Cimarron						.03						.11	.08			.07			.47	.10	.45				.01	.01		5.18	.03			6.54
Tulsa ||	Arkansas	.47	.28					.35			T.			T.			.20	.04		.40	.11	.32				.10	.63		3.04	T.			5.94
Vinita	do	.33	.20					.20										.46		.71		.56				2.06			4.09				8.61
Wagoner	do			2.00		.65			1.50			.50				1.00				.30						.65			1.30				7.91
Waukomis	Cimarron	.52									T.			.10					T.	.50	1.75					.20		1.65	4.15				8.87
Waurika	Red	.12								.02			.89				.57			.06						.06		T.	.55				2.27
Weatherford ||	Canadian	.12				.02			T.				.08				T.		.05	.30						.05			2.33				2.95
Webbers Falls	Arkansas	.44					.25			T.							.85									2.20			.50				4.24
Whiteagle	do	.53	.26											.14						.53	.37	.48				1.00	.12	1.66	2.50				7.59
Woodward	Canadian																															
Wyandotte	Arkansas	.10	.30								.30							.65		.58		.43				.72	.58		2.00	.40			6.06
Missouri.																																
Belle	Meramec	.22	.67				.53			T.			.53	.03			.20	.80	.15			.32				.50	1.60		1.83	.20			7.68
Birchtree	Black	.72	.18				.15	.09					.79	.08				.79		.14		.46				.59	1.98		.55	.32			6.84
Cape Girardeau	Mississippi	.30	1.20	T.				.10			.01			.50	.05		1.30	.20			.05		.20				2.00	.20		1.20	T.		7.31
Cardwell	do	3.15	1.81				.74				.02		.20					.32								T.	.44	1.52	.98	.76			9.94
Caruthersville	do	2.08	1.69				.04	1.13		T.	.04		T.	.12	T.		T.	.64		T.			.03			T.	.51	3.00	1.75	1.15			12.18
Cassville	White	.72	T.				.34		.02			.06					.41	.27		.37		.36					.08		3.30	.19			6.12
Dean	Neosho	.52	.20				.30			.10	.03	T.	.06				.78	.39		.33		.56				.91	.10		3.35	.05			7.68
Doniphan	Black	1.00	.25				T.	.17		T.			.38	.03			2.00	.20		.10		.05	2.00			.15	2.52	.08	.73	1.50			11.16
Gano	Meramec	.24	.68				.28				.06		1.12	.06	.12		.12	.85		.22	.05	.26				.81	1.79		1.09				7.75
Goodland	Black	.95						.38						1.36	.95			1.06		.16		.77					3.20		.20	.53			9.56
Hollister	White	.62	.10				.40			.10							.40	.10		.40		.40				2.00			1.30	1.30			7.12
Ironton ||	Mississippi	.20	.55	.05				.45		T.				.83	3.45			.80			.10	.15	T.				3.50	1.00	.15	.45			11.68
Jackson	do	.96	.58				.30						.47			.07						.54				2.25	.18		.77				6.12
Joplin	Neosho	1.05					.20										.15	.47		.35		.62	.54		.41	1.09	.25		2.25	.21			7.59
Koshkonong	Black	1.48	.18				.12	.17		.04	T.		.80	.22	T.		.07	.85		.21		.20				1.00	1.85	.01	.38	.26			7.84
Lamar ||	Neosho	.17	.15	.88				.04			T.	T.	T.	T.				1.10	.42			.92					.56	.93		2.52				6.69
Marble Hill	Mississippi	1.00	.70					.25					.60										.60			.40	2.00		.70				6.25
Mountaingrove	White	.33	.32				.37			.04	T.		.34	.15			.05	.64		.11		1.15				.72	1.67		1.23	.32			7.44
Mount Vernon	Neosho	.27	.36				.20			T.	.04						.45	.28		.38		1.15				.60	T.		4.00	.30			8.03
Neosho	do	.36	.26				.21			.04	.02						.47	.45		.43		.73				1.50	.02	.02	3.41	.32			8.24
New Madrid ||	Mississippi	.52	2.66					1.05						.50		.04		.30	.03								.75	.85		1.80			8.50
Oakfield	Meramec	.22	.76				.25			T.			.60	T.	1.05		.08	.96		.07		.17				.63	1.75		1.37	.35			8.26
Olden	White	1.40						.40					.10	.70						.23		.80				.67	1.70			.85			6.85
Rolla	Meramec	.15	.84				.02			T.			.10	T.	.02		.06	1.18		.25		.34				.75	1.37		1.80	.06			6.96
Springfield	White	.30	.27				.18			T.			.21	T.			.33	.11		.31	T.	.60		.01		.62	.76	.34	1.83	T.			5.87

TABLE 2.—*Daily precipitation for April, 1912. District No. 7*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Kentucky.																																
Blandville	Mississippi	1.72	.62				.13	.38			.03		.26					.34				T.	1.04			.08	.92	.51	.82	.96		7.81
Tennessee.																																
Arlington	Mississippi	.30	2.58	.05				1.47						.15	T.			.58	.12		T.		.15				T.	4.20	T.	1.55	T.	11.15
Bolivar	do	.21	3.10					.97						.49	.41			.47			.10		.51				T.	5.35		2.29	T.	13.90
Brownsville	do	.17	2.40	.05	T.			.88						1.02	.07			.32	.94		.06		.58				T.	2.35	.05	1.46	.01	10.36
Covington	do	.62	2.00						1.30						.64			.45	.75		.52		.15					1.75		1.75		9.93
Dyersburg	do	.60						1.10						.60	.15			.45	.15				.30					1.40		1.60		6.35
Jackson	do	.82	2.80					.68						.74																		10.04
Kenton	do	2.60	1.30					1.44		.03	.04		.25	.10	.35		.03	.87		.02		.02	.27			.05	.12	.90	.77	1.05		10.21
Memphis	do	1.52	T.				1.34	.32					.12	T.			.57	.27		.03	T.	.01	.16			T.	.88	1.56	1.23	T.		8.01
Milan	do	.02	2.30	T.				.61				T.		1.55	.62			.07	.29		.11		.55				T.	2.00	T.	2.03		10.15
Trenton	do	.85	1.80				T.	1.00					.50	.16	.54		T.	.50		T.			.18				.05	1.65	.52	1.25		9.00
Union City	do	2.47	2.10				.02	1.08			.01		.80	.13				.75					.58			.17	.36	.65	1.90	1.00		12.02
Arkansas.																																
Alicia	White	*	3.40					.60					.40					.32				.42				.50	.08	.55	.50			6.77
Amity	Ouachita	2.00					1.60						1.10				.70			.60		1.00				.20		.20	2.00		9.40
Arkadelphia (near)	do	1.39	.88				.84	.53		.07			.12	.29			.14	.44		.08	.67	.60	.08			.05	.25	2.09	.64			9.16
Arkansas City	Mississippi	2.16	1.90					.88			.10		.02	.50			.30	1.00			.10							.02	1.60	2.40		10.98
Batesville	White	.88	2.10	T.				.40			.08			.64			.02	.68			.04		.48			T.	.56	.06		.90		6.84
Bee Branch	Arkansas	3.70						.40					T.	.20			.55	.50		T.	.10		.10			1.10	.20		1.20			8.05
Benton	Ouachita	1.50	.52					2.13			.16						.98	.57			.81		1.71				.11			1.27		9.76
Bentonville	Arkansas	.99	.06				.60			.07	.02		.15	T.			.79			.30		.40				1.15		.01	3.00			7.54
Bergman	White	1.42	.11				.37			.15							.19	.44		.23						2.28	.52		.84	.15		6.70
Black Rock	do	1.05	2.00					.39						.43	.13			.12			.02		.71		.02		2.50	.10		.93		8.40
Brinkley	do	.91	.89					1.62			.03	.03		.92	.41			.73			.36	T.	.41				T.	1.81		1.32		9.44
Calico Rock	do	.51	1.30	T.			T.	.25			.10			T.				.60					T.			T.	3.50	1.80				8.06
Camden	Ouachita	.68	.28					1.73			.45		.32	.06			1.40	1.50			.01		.18				.10	.22	.08	1.05		8.06
Centerpoint	Red	1.36					.95			.20			1.15	.05			1.00			.45	T.	T.				.40	.50	.36	2.05			8.47
Clarendon	White	2.43	.35					1.10			.02	.01		.53	.25		T.	1.06		.26	.13		.22				.03	4.30	T.	1.25		11.96
Conway	Arkansas	2.65					T.	.80			.05		T.	T.			.50	.30		.10	.06	T.				.45	.03	T.	.85			5.79
Corning	White	1.79	.45				.07	.49			.02	T.	.26	.01				.23		.05		T.	.39			.11	2.15	2.31	.90	.36		9.59
Dardanelle	Arkansas	.78	2.12					.11			.04			.04	T.		.02	1.52		.04	.04						.67			1.17		6.55
Dodd City	White	*	1.17					.40		.12				.15			T.	.58								1.60	1.00		.90			5.92
Dumas	Arkansas																															
Dutton	White	1.39	.09				.68	.05		.15	.07		.27				.30	.10		T.					2.75	.36		1.10	.29		7.60
Eldorado	Ouachita	.46	.86					.99			.75		.60	.29	.06		.63	.70			.10		.05					.71		2.34		8.54
England	Arkansas	2.80	.52					2.00			.03			.30	T.			1.80		.22	.18		.15				.12	2.00		.75		10.87
Eureka Springs	White	.83	.25				.36			.17			.18	T.			.49	.49		.34		.55			1.49	.27		1.34	.44		7.20
Fayetteville	do	1.53	.11					.35		.13	.05		.16	.31			.94	.12		.19					1.62	.37		.60	.19		6.67
Fordyce	Ouachita	.40	.23				.64	1.04			.82		.34	.03			.38	.82					.18				.30	1.26	2.14			8.58
Fort Smith	Arkansas	.84					.20			.13	T.		.18	T.			.47			.07	T.					.32	T.		.39	T.		2.60
Frazier's Turnpike	do	1.85					*	2.45		.14			.17				1.94			.64		1.04				*	*	1.97	.98			11.18
Fulton	Red	1.40	.60				T.	.70			.30		.60	.24			T.	2.10		.10	.12		.26				.26		.86		7.54
Hardy	White	1.70	.26				T.	.22		.01	.02		.12	.03			.07	.35		.07		.02				.87	3.90	.18	.80	.11		8.73
Helena	Mississippi																															
Hot Springs	Ouachita	2.47					1.98				.10			.33			1.69	.50		.30	.63		1.50				.36	.29	1.71			11.86
Huttig	do	.15	.28				.06	.63		.07			.85	.03	.13	.28	.06	.04			.43		.04						.40	.87		4.30
Jonesboro	White	*	4.71				*	.84					.50		.18		.04	.52					.10				.61	.44	*	1.25		9.19
Junction	Ouachita	.55					.63			.42		1.08					.16			T.							T.	.67				3.51
Lake Farm	Arkansas	2.00					1.20			.12			.22	.30	.21		1.20	.81					.10				.40	.72	2.80			10.08
Lewisville	Red	.40	.50					.83		.36			.89				.65	.28			.10		.45				.40		.70			5.56
Little Rock	Arkansas	1.28					1.64	.02		.03	.05		.06	T.			1.66	.23		.66	.35	2.28	T.			.07	.84	.15	1.44			10.76
Lutherville	do	2.00	.04				.34			.11			.12				.44	.42		.09		T.				.63		.12	1.09			5.40
Malvern	Ouachita	3.10	.53					1.75			.10	T.	T.	.17			.10	.65		.20	.44		1.37				.10	.32	.10	1.38		10.31
Mammoth Spring	White	1.73	.11					.30		.04	.04		.90	.06			.04	.65		.11						1.02	2.27	.06	.53	.65		8.51
Marked Tree	St. Francis																															
Mena	Ouachita	3.15					.25	.38		.57			.75	.01			.35	.75		.25	.06	.15				.14	.03	.31	1.12			8.27
Newport	White	1.30	2.10					.73						.13				.65					.02				.45			1.23		6.61
Ozark	Arkansas																															
Pine Bluff	do	3.00	.35					1.98			.05			.28			.10	1.22		T.		.02	.24				T.	.56	.10	1.05		8.95
Pocahontas	White	2.40	.45				.10	.25			.03		.35	.08				.10		.05			.45			.20	2.50	1.80	.90	.35		10.01
Pond	Arkansas	.77	.16				.26			.07			.17				.82	.17		.41		.28				.99		T.	1.97	.33		6.40
Portland	Ouachita	.56	.75					.61			.56		.40	.57	T.	.85	.79	.20			.34	T.	.08				.03			.41		6.15
Prescott	do	1.57	.65					1.30			.22		.30	.22			.35	1.87		.05			.10				.02	.50	.10	.42		7.67
Rogers	Arkansas	.89	.06				.32		.10				.03				.74	.32		.32						1.61			1.16	.72		6.27
Springbank	Red	.55	.45				T.	1.23			.73	.02	.75	.38	T.		1.00	.76		T.	.10		.15			T.	T.	.43	.17	1.15		7.87
Stuttgart	Arkansas	3.16	.28				.75	.76			.22		.82	.28	.15		2.12	.45		.12	.05		.22			T.	.93	1.37	1.26			12.94
Subiaco	do	1.29	.03				.21			.08	T.		.10	.06			.48			.12			T.			.31	T.	.07	.25			3.60
Swain	White	2.45					.69			.18	.02	.02	.20	.07			.12	.33		.05			T.			1.29	1.71		.90	.19		8.22
Texarkana	Red	.42	.54				T.	1.02			.50		.90	T.			.15	.75		T.	.12		.75				T.			1.15		6.30
Warren	Ouachita	1.69	.83					1.25			.34		.45	.17	.35		1.59	1.55					.38					.36	2.35	1.54		12.85
Whitecliffs	Red	1.30	1.70								.16		1.50				.15	1.50		.10	.44		.75				.01	1.25	T.	3.62		12.42
Wiggs	Ouachita	2.17					.64	1.30	.10	.12			.12	.11			1.30	.43		.28	.31		1.16			.22	.11	.14	1.66			10.17
Wynne	St. Francis	.64	.58					1.66						.55	.25			.96			.18		.14				.10	1.32		1.21		7.59
Mississippi.																																
Anguilla	Yazoo	.30	.80				.20	.55			.85		1.65	T.		.90	3.05			.62	.17	.17				.05	.10	.25	2.07			11.73
Austin	do	.57	1.42					1.38			.12		.69		.16		.82	.17	.07		T.	.59			T.	.60	1.77	.32		2.16		10.84
Batesville	do	1.26	1.00					1.38				.06		.42	.36		.10	.70			.03		.12					3.24	.21	.73		9.61
Big Creek	do	.85	.91								T.	T.	.04	.05		1.26	3.76			T.	T.	T.	.80				T.	1.04	T.	.20		8.91
Byhalia	do																															
Canton	Big Black		.15				.05	.33			.35		1.20		.04	2.30	.78				.64	.27	.63				.06	.37	.84			8.01
Charleston	Yazoo	.32	.60				.18	.76			.12		.58			1.50	2.20	.02			.13		.05					1.27	.08	1.15		8.90
Clarksdale	do	1.73	1.19	.01				1.27				.05		.67	.67	T.		.89	T.	.01	T.		.02					1.07	.14	.53		8.25
Cleveland	do	.57	1.53				.10	1.12			.15		.54			.31	1.33						.11					2.37	1.60			9.73
Coffeeville	do																															
Corinth	Mississippi	.54	1.36					1.20			.20	.04		.14	.22			.45	.02		.03		.58				T.	1.62	.04	1.80			8.24
Crenshaw	Yazoo	.33	.60				.28	.97			.12		.40	.78	.04	.01	.70	.40		.03	.02		.61				.18	2.86		.78		9.11
Denmark	do																															
Duck Hill	do	1.67	.19				.11	.42			.18		.42	.06		.83	4.47			T.	.59	.54	.10				T.	1.70	1.90	2.00			14.58
Edwards	Big Black	.35						.50			.50		1.35			2.45	1.44	T.			.50	.30	.30				.05	1.15	.40	1.50			10.79
Enid	Yazoo	.16	.94				.27	.97								.70	2.20											1.39		1.20			7.83
Fayette	Mississippi		.39					.67		T.	1.13		1.98			.48	.26				.17	.36							.82			6.26
Greenville	Yazoo	3.49	.44					.93			.31		.12	.80		.75	.90	.54			.42	T.	.02						.14	.43			9.29
Greenwood	do	4.50	.26					.71			.12			.67	T.	.50	1.72	5.28			.44	.05	.03						.11	2.12			16.51
Grenada	do																															
Hernando	do	.47	1.60					1.08			T.	T.		.22	.64			1.05	T.		T.		.14				T.	2.94	T.	2.68	T.		10.82
Hickory Flat	do						.40	.60						.10	.07		.60						.95					2.10		.65			5.47
Holly Springs	do	.60	1.44					1.45			.02	.05		.18	.04			.42	T.		.02		.82					2.58		1.24			8.86

TABLE 2.—*Daily precipitation for April, 1912. District No. 7*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Mississippi—Con.																																
Kosciusko ‖	Big Black	.52	.38					.86	.05		.21			.65	.01		1.77	2.30	.06		.75	.12	1.17					T.	.30	.95		10.10
Lake Cormorant	Yazoo	.65	1.37				.32	1.45						.25	.18			.58	.18		.07		.37			.07	.40	2.75	.50	1.57		10.71
Lula	do																															
Malone	do	.12	1.00				.47	.70			.17		.39					.45	.06				1.90					2.58	.45	1.20		9.49
Marks	do																															
Natchez ‖	Mississippi		.80						1.42		.97		.07	2.28				.36	.44		.25	.14							1.05		7.78
New Albany	Yazoo																															
Pontotoc	do	.30					.60	.40		.40			.32	.40	.50	2.00	1.00	.50		T.			.50				2.00	.50	1.00	.50		10.92
Port Gibson ‖	Mississippi		.44					.58	.12		.64		.27	1.62		.07	3.55	.56			.17	.56	T.					.13		.47		9.18
Rosedale	Yazoo	2.05	1.40					1.23			.10			.45	.05			1.75					.20					.40	.70	1.30		9.63
Senatobia	do						.21	1.16				.45		.16	.11		.73	.18					.90			.10	2.26	.28	1.25			7.79
Shoccoe	Big Black	.16	.43				T.	.45			.43		1.04		.04	3.50	1.52				.40	.15	.30				T.	.28		.13		8.83
Suffolk	Mississippi		.32					.49		.20	.40		2.37	.06	.05	.05	.85				.48	1.12					T.	T.	.62	.32		7.33
Swan Lake ‖	Yazoo	1.25	.25					.70				.12		.52			.07	1.26			.03		.11						1.41	1.74		7.46
Tchula	do	T.	.68				.20	.49			.21		.83	T.		.68	3.40	T.		T.	.80	.12	.83				T.	.14	.32	.83		9.53
University	do	.39	.38			.18		.89		.27			.08		.04		1.00	T.			.07	.31					T.	3.70	.10	.77		8.18
Utica	Mississippi		.28					.60			1.60		2.35			*	4.17				.87							.05		.54		10.46
Vicksburg	do	.25					.01	.23		.18	.35		2.23			2.34	.66	.01			.87	T.	.41				T.	.06	2.11			9.71
Water Valley	Yazoo		.42				1.40				.10		T.	T.		.55	1.00				.20	.45					2.20		.95		7.27
Woodville	Mississippi		.20					.31		.05	.48		3.07	.11			3.15	.04				.71	.04						.23		8.39
Yazoo City ‖	Yazoo	.36	.55					.89			.51		T.	.85	.24	.85	1.60	2.00			1.13	.22	.63					T.	.69	1.07		11.59
Louisiana.																																
Abbeville	Coast		.40					.25	.10	1.25	.08		T.		.11	.10	.92			.05	.05	.02								.65		3.98
Alexandria ‖	Red		.25						1.00		.62		3.23					.50			.10								1.25		6.95
Amite ‖	Coast		.50					.50			.50		T.	3.50	.85	.20	.80	5.80	T.		.12	.80	T.						1.70		15.47
Antioch	Red	.70	.28				.48	2.00		.50	.28		1.55				.25				.30								.65		6.99
Avoca Island	Coast				.50	T.	1.80			.80	T.			1.25			T.													.25	4.60
Baton Rouge ‖	do		.55						.12		.30			1.12	.05		.79	4.05			.10	.11	.04						.30	.95		8.48
Burnside	do																															
Burrwood	do								.38								.20	1.30											.18		2.06
Cades	do	.45						.71	.17	.78	.22			T.		.07	2.06			T.	.10	T.							.40		4.96
Calhoun	Ouachita	.56	.42				T.	.59		.02			2.25		.30	1.32	.06	T.		T.	.51	.06	.23			T.	T.		.19	.43		6.94
Cameron	Coast	T.						.98	.44	.32	.46						1.60				.03								.04			3.87
Carrollton	do																															
Cheneyville ‖	Red		.20						1.00		.85		.60	.40			.10	1.65				.55							.50		5.85
Cinclare	Coast	.60						.20		.45			.80			1.10	3.60			.10	.20							2.10			9.15
Clinton ‖	do		.15					T.	.10		.20		.09	2.90	.10		.27	2.60			.07	.65	.08					T.	.35		6.96
Collinston	Ouachita	.02	.40					.45		T.	.12		1.56	.04		3.20	.90				.50	.08	.04				.06		.27	.55		8.19
Columbia	Red																															
Covington ‖	Coast		.19						.41		.13	.14	.05	4.00	.91	.30	3.68	4.75	T.		.57	2.33	.04						T.	.22	.02	15.74
Dodson	Red		.30					.98		.17			1.66			.76	.37				.31	1.14	.65						.68			7.61
Donaldsonville ‖	Coast		.58						.15		.83	1.05		2.00			.20	1.90			.10	.35	T.							.45		7.01
Dutchtown	do							.26		.45	.35		T.	1.25	.10	.45	1.92			.20	1.04	.15							.50	.34		5.36
Farmerville ‖	Ouachita	.64					.85			.11		.77	.58		.26	1.06	.06			.30		.26							.48			6.77
Ferriday	do		.48					.45			.95		1.15			2.50	.52				.22									.50		2.19
Franklin ‖	Coast			T.				T.	.29		.56		.01	.03	T.		.05	.47			.33	.04	.03							.08		17.90
Franklinton	Pearl		.24					.45		T.	.02		2.70	2.03	.01	.12	5.80	1.83			1.00	2.00				T.	T.		1.70			4.58
Grand Cane ‖	Red		.26					1.27			.32		.97			.02		.13			.69	.11	.61							.20		5.33
Grand Coteau	Coast	T.	.18					.15	.65	1.75	.05	T.	T.			.05	2.35												T.	.15		8.15
Hammond	do							.17				.46		1.55	1.00	.15	.45	2.65	.30			.75	.35							.32		2.30
Houma	do		.20							.35			.10	.95		.05	.10	.25			.30											4.28
Jena	Red	.30						.47		.46			.56				.48				.22	.59							1.20			4.67
Jennings ‖	Coast		.10						1.18		1.11	.05					.24	1.74				.05								.20		
Laark	Red																															4.58
Lafayette ‖	Coast		.01						.41		.90	.08		.03	.04	.20	.03	1.75			.02	.41	.05							.65		6.90
Lake Charles ‖	do		.16					.59	1.90		.80	.40						2.00				.15								.90		6.99
Lakeside	do							1.13	.20	1.20	1.20		30				2.96															4.97
La Rose (near)	do		.10					.18		.10	1.20		.16	2.04	.13		.29	.20		.10	.47										.19	8.37
Lawrence ‖	do								1.15		.05	2.10	.07	2.45		.08		1.34	.02		.50	.42										
Leesville	Sabine																															
Liberty Hill ‖	Red	T.	.67				T.	.70		.10	.05		2.50			.50	.10	T.			.80	.10	.42						.06			6.00
Logansport	Sabine							.78									.05	.08			.84		.68	.15						.10		2.68
Melville ‖	Red		.21						.49		.52			.08	.68		.08	2.04			.02	.47	.04				T.					4.63
Merryville	Sabine																															
Minden ‖	Red	.60	.83					1.48			.29		.77	.31	T.	.50	.20	.69			.59							.50		.19		6.95
Monroe ‖	Ouachita	.12	.15					.63			.15		1.85	.43	1.65	.23	1.70		.05		.60	.09	.06							.90		8.61
Morgan City	Coast		.11	T.					.10		.27	T.	T.	.25	T.	T.	T.	.22	T.		.05	T.	T.							.02	.01	1.03
Newellton	Mississippi		.37				T.	.21		T.	.61		2.37	.03		4.06	.94				44	1.14						1.65	1.35		13.17
New Iberia	Coast	T.	.10					.45		.65	.55	T.	T.	T.	.18	.25	1.40	.60		T.	20	T.				T.		T.	T.	.23		4.61
New Orleans (1)	do		.09					.01	.13	.06	.57	.01	1.07	.55	1.60	.05	.40	1.29		.19	.38	T.					T.	1.02		1.20		8.62
New Orleans (2)	do		.10						.13		1.02		.08	1.43	2.77	.06		1.25			.45	.04						.58	.38	.90		9.19
New Orleans (3)	do		.10					.01	.11	.01	.29	.28	1.08	.33	2.12		.30	1.35		.04	.46							.60		.94		8.02
New Orleans (5)	do		.10						.10	.03	1.34	.01	1.13	.70	1.85	.07	.57	.64		.20	.21							1.65		.86		9.46
New Orleans (6)	do		.08						.11	.06	.60		.93	.59	1.66	.04	.45	1.05		.11	.39							1.00		1.18		8.25
New Orleans (7)	do		.14					.10	.12	.09	.32		1.14	.33	2.19		.27	1.73		.08	.68	.01						.52		1.70		9.42
New Orleans (8)	do		.12						.10	.06	.67		.87	.27	1.12	.09	1.06	.37		.18	.29							.71		.94		6.85
Opelousas ‖	do		.05					.05	.33		.67	T.	.19	T.	T.	.41	.11	2.84			T.	.07										4.72
Paradis	do		.27				.07		.10		.26			1.17	.50			.50			.27									.20		3.34
Pearl River	do		.08	T.					.98			.20	.14	4.45	.60	.08	7.50	1.28	T.		.44	4.14	T.						3.34		.20	23.43
Plain Dealing	Red	.47					.73	.61					1.09		.27		.22	.34					.01			.06	.31	.02	.92			5.65
Rayne ‖	Coast		.26						.98		1.20	.05		T.		.05	.15	1.60			T.	.10						.06		.10		4.55
Reserve	do		.07						.06		.51	.74		3.22	.57	.38	.26	1.09			.24	.33									46	7.96
Richland Plantation	Red																															
Robeline ‖	do		.33					1.60	1.75		.18		.98					.70			.60	.41								.35		6.90
Ruston	Ouachita																															
St. Francisville ‖	Mississippi		T.					T.		1.35			1.36		T.			4.13		T.								4.01			10.85
Schriever ‖	Coast							T.	.30			1.30		.54		.03	.05	.54	.03		.28	.03	.04						T.		3.14
Shreveport	Red	.35					.51	1.30		.24	.01	T.	1.08	.23			1.03			.41	.30	T.				T.	.06	1.97				7.49
Simmesport	do	.03	.54					T.	.76		.49		T.	.13	.03		.30	1.27			.02	.87	.05							.06		4.55
So. University Farm	Coast		.20					.05		T.	.73	T.	.01	2.10	2.90	.05	.04	1.72		1.00	.45	T.	T.					.58		.98		10.81
Sugartown	do							.62		.32							2.12				.38								1.15			4.59
Tallulah ‖	Mississippi		.62					.46			.22		1.30	.95	1.05	2.45	1.55	.47			.75	.55	.90							.95		12.22
Walker	Coast	.36									.42	.20	.03	1.04			.36	3.33								.03		1.31				7.58
Winnsboro	Red																															

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations for April, 1912. District No. 7, Lower Mississippi Valley.*

Date.	Colorado.						New Mexico.				Texas.				Kansas.										Oklahoma.			
	Lamar.		Leadville.		Pueblo.		Albert.		Cimarron.		Amarillo.		Paris.§§		Dodge City.		Ellinwood.		Iola.		Liberal.		Wichita.		Ardmore.§§		Bartlesville.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	40	31	28	12	49	31	71	34	44	26	41	31	64	55	42	30	42	31	47	39	40	30	43	33	50	48	54	43
2....	52	33	42	12	65	25	66	36	57	22	63	31	63	42	66	33	66	31	61	36	66	31	62	37	63	40	64	38
3....	74	40	48	16	74	26	77	41	69	22	70	37	72	39	75	40	77	34	73	44	76	38	71	43	72	42	75	38
4....	80	44	44	25	72	46	70	38	68	32	75	42	75	42	76	46	74	48	69	52	78	45	66	50	69	45	75	50
5....	82	41	44	25	75	41	72	36	69	31	79	47	74	50	85	44	86	48	76	54	85	49	77	52	76	51	76	49
6....	80	42	35	15	56	37	77	42	53	31	59	42	69	54	62	42	74	47	68	45	72	46	63	44	76	56	76	52
7....	67	25	52	11	66	24	69	38	59	26	59	32	59	50	58	30	60	28	57	35	62	28	56	36	57	47	59	42
8....	67	41	45	17	63	32	74	30	56	27	51	36	61	43	58	32	66	35	66	36	56	33	64	38	69	40	68	39
9....	75	36	51	19	69	32	71	36	66	23	75	40	60	45	73	41	77	42	68	47	75	40	72	48	58	50	65	45
10....	78	36	44	19	64	34	62	33	60	31	80	42	68	52	78	41	72	52	58	51	83	39	58	53	69	50	63	50
11....	78	39	46	12	68	33	74	38	66	28	78	42	74	58	77	43	81	46	72	52	74	42	78	54	81	55	73	52
12....	76	44	38	20	66	40	68	31	60	36	77	45	80	58	80	52	80	54	80	60	80	52	77	58	78	53	81	57
13....	68	34	26	11	57	38	65	31	51	27	64	36	74	58	69	44	72	48	73	60	75	41	70	51	68	55	74	64
14....	63	35	31	13	65	43	72	31	61	36	64	42	80	49	68	41	65	45	73	49	73	38	69	48	81	52	77	46
15....	68	33	41	9	55	34	60	37	54	28	60	38	88	54	61	37	61	35	65	45	64	40	61	42	78	54	74	52
16....	61	34	39	18	58	36	50	39	49	33	50	40	65	53	56	36	54	34	50	37	59	41	49	36	59	51	50	42
17....	60	30	39	15	52	32	61	41	51	31	62	38	63	44	55	29	48	23	45	35	59	29	47	33	62	40	55	39
18....	53	30	37	13	40	31	60	36	53	27	59	40	64	41	42	27	57	23	56	38	51	31	55	32	66	43	60	35
19....	54	32	40	11	53	29	65	35	59	29	72	43	72	43	52	39	57	43	56	44	56	37	55	43	75	52	55	36
20....	63	42	24	16	54	34	62	39	53	31	69	45	76	54	72	41	67	46	74	48	70	43	64	47	77	55	73	45
21....	53	34	29	12	50	32	64	35	54	22	71	37	84	57	53	36	65	40	70	47	64	36	63	42	81	63	72	52
22....	66	33	36	7	56	30	65	33	60	20	70	36	74	50	63	29	65	31	63	43	65	32	63	37	72	46	66	44
23....	68	35	41	9	60	34	69	39	64	29	69	42	78	47	69	40	69	44	70	39	71	38	66	46	80	45	73	41
24....	77	35	49	18	76	34	72	39	71	33	74	44	85	47	75	41	74	34	76	39	78	39	74	44	85	53	80	47
25....	76	49	38	21	66	46	68	44	64	31	78	54	87	54	80	45	84	55	62	53	76	41	70	53	77	65	75	52
26....	69	42	39	13	57	38	67	40	61	32	73	42	86	65	69	42	74	46	73	56	70	43	73	50	83	68	73	57
27....	71	43	42	25	65	39	72	54	68	36	82	46	80	66	69	48	72	48	71	49	68	45	71	50	80	61	77	57
28....	68	40	44	18	62	44	75	43	59	32	58	44	76	60	54	46	61	47	71	53	66	44	70	46	76	60	74	55
29....	69	31	40	22	76	35	66	39	68	31	74	40	66	55	61	44	56	43	61	48	66	38	58	46	69	55	67	51
30....	85	44	49	30	81	49	85	52	74	47	89	50	83	48	84	49	82	47	76	44	87	37	78	47	85	51	75	49
Mns..	68.0	36.9	40.3	16.1	62.3	35.3	68.3	37.6	60.0	29.7	68.5	40.8	73.3	51.1	66.1	39.6	67.9	40.9	66.0	45.9	68.8	38.9	64.8	44.6	72.4	51.5	69.3	47.2

Date.	Oklahoma.														Missouri.													
	Enid.§§		McAlester.		Mangum.§§		Muskogee.		Oklahoma.		Weatherford.§§		Woodward.		Caruthersville.		Ironton.§§		Lamar.§§		Olden.		Springfield.		Blandville, Ky.		Jackson, Tenn.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	47	37	58	49	68	37	60	47	50	36	55	37	60	42	62	53	60	54	68	42	60	54	57	40	65	55	71	55
2....	66	35	65	41	70	38	61	38	61	35	66	34	66	39	66	41	58	38	45	42	59	36	53	32	61	41	70	47
3....	76	38	74	43	75	35	73	43	70	45	72	36	75	42	81	38	70	31	59	32	.....	.....	70	45	63	40	75	39
4....	70	47	72	44	70	45	72	49	67	50	70	48	71	53	86	46	75	38	73	44	.....	.....	71	50	73	49	76	59
5....	83	55	76	53	75	48	77	55	74	55	76	51	80	54	84	57	79	57	73	48	.....	.....	77	55	74	60	74	56
6....	67	60	72	56	74	45	72	49	75	51	75	55	75	61	69	59	71	59	77	55	75	57	70	47	68	60	72	59
7....	61	38	62	45	65	43	64	43	57	40	60	35	62	38	61	47	59	39	73	52	59	39	54	37	60	44	63	33
8....	70	34	70	37	67	34	67	40	65	42	66	33	69	38	76	43	65	29	58	37	67	33	63	38	61	39	66	34
9....	76	41	70	50	78	43	64	47	63	51	74	39	70	48	83	39	72	34	68	42	68	38	58	44	69	43	74	38
10....	75	51	70	52	84	35	67	51	70	54	83	50	61	54	83	47	67	50	64	47	69	39	64	49	73	53	76	56
11....	81	55	75	55	85	56	78	54	79	58	85	57	79	54	92	54	80	45	63	51	75	49	75	49	75	56	83	57
12....	84	53	82	58	85	57	82	70	75	57	83	56	82	64	81	56	80	56	78	52	74	56	73	58	77	60	78	56
13....	71	51	81	59	74	47	78	70	70	53	73	47	78	55	85	57	67	56	80	60	75	41	79	57	70	59	78	55
14....	79	51	79	56	83	45	79	52	76	50	79	45	77	49	90	58	80	45	78	58	78	40	74	53	79	63	80	56
15....	68	50	79	55	72	48	76	51	68	49	69	46	70	48	97	54	82	42	76	54	82	56	71	53	81	58	82	57
16....	55	48	73	48	57	49	68	45	56	44	59	48	67	45	74	58	56	50	69	49	73	49	53	39	71	59	71	55
17....	60	46	58	42	68	34	53	40	59	36	65	32	58	32	63	51	45	45	58	42	52	43	40	37	63	47	66	59
18....	56	32	60	38	64	36	61	35	56	41	58	35	56	34	76	42	57	34	44	38	57	36	51	33	51	39	55	46
19....	55	35	74	48	71	45	69	47	65	45	58	40	56	44	69	43	57	31	59	38	54	39	52	42	58	39	61	38
20....	65	45	76	51	85	48	77	50	72	51	80	47	67	48	88	52	71	42	50	40	71	42	70	46	69	49	73	38
21....	75	45	83	64	81	43	77	61	72	49	75	39	70	44	90	57	77	53	76	44	76	49	75	46	74	56	80	60
22....	68	42	80	46	75	48	73	46	64	44	80	40	66	42	78	56	62	47	72	54	64	41	58	43	72	50	74	59
23....	68	44	79	45	85	43	76	43	76	50	80	42	77	46	86	53	71	32	65	44	69	42	65	42	66	44	74	40
24....	82	44	86	52	85	47	83	63	80	47	82	40	80	42	92	51	77	41	71	50	76	48	74	50	73	57	76	45
25....	83	47	75	60	91	48	74	58	76	62	89	46	77	55	75	54	63	45	77	42	66	53	62	50	73	56	80	46
26....	70	52	84	71	85	50	79	66	77	56	81	50	76	54	88	60	78	51	76	53	79	47	74	54	74	65	74	63
27....	77	55	79	57	80	44	77	59	77	60	76	50	74	54	90	49	71	50	75	54	74	53	72	51	71	59	72	60
28....	72	53	76	57	73	58	75	57	71	55	70	54	75	54	77	60	70	54	74	51	70	58	64	52	67	56	80	58
29....	62	49	74	53	74	47	65	53	60	49	67	51	68	49	72	56	59	56	70	54	61	49	54	46	66	51	73	61
30....	83	48	83	46	95	49	80	48	81	52	82	49	82	51	61	50	67	46	64	48	66	46	69	45	56	43	63	51
Mns..	70.2	46.0	74.2	51.0	76.5	44.8	71.9	51.0	68.7	48.9	72.9	44.4	70.8	47.8	79.2	51.4	68.2	45.0	67.8	47.2	68.5	45.7	64.7	46.1	68.4	51.7	73.0	51.0

TABLE 3.—*Maximum and minimum temperatures at selected stations for April, 1912. District No. 7*—Continued.

Date.	Tennessee.				Arkansas.																Mississippi.					
	Kenton.		Memphis.		Benton. ville.		Corning.		Dardanelle.§§		El Dorado.§§		Fort Smith.		Little Rock.		Pine Bluff.§§		Texarkana.§§		Wynne.§§		Clarksdale.§§		Corinth.§§		Greenville.§§	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	65	54	73	56	58	44	.....	.....	61	56	64	46	63	48	68	56	75	61	74	56	69	55	77	54	74	52	80	55
2....	64	44	61	46	59	34	.....	.....	62	47	59	48	62	43	60	48	65	50	63	44	60	50	55	54	60	56	58	51
3....	65	38	68	46	72	41	.....	.....	75	39	76	39	74	43	72	42	74	38	74	37	65	41	72	41	69	38	70	39
4....	74	45	72	57	69	48	.....	.....	76	43	78	54	73	50	74	52	77	46	78	40	69	46	75	44	75	45	77	54
5....	74	56	74	62	74	56	.....	.....	78	51	78	54	78	55	76	60	78	50	78	47	65	59	78	51	74	52	78	56
6....	68	60	68	56	71	50	.....	.....	66	60	68	58	69	57	66	58	66	62	65	56	65	62	68	59	70	58	68	51
7....	64	47	56	48	56	40	77	42	62	48	59	52	62	47	59	51	60	52	59	53	62	51	59	53	56	48	61	51
8....	62	39	59	45	66	36	66	37	65	36	67	44	65	42	62	46	65	28	69	39	60	34	65	40	64	37	61	41
9....	71	39	68	49	58	44	70	40	68	39	79	42	58	47	72	45	75	40	67	35	70	37	75	40	73	40	74	41
10....	73	54	66	56	69	49	68	54	66	50	70	49	67	51	62	54	68	44	72	50	67	52	68	44	74	47	68	55
11....	77	56	76	57	77	51	79	50	81	51	80	50	80	53	80	57	80	50	81	51	74	50	83	55	80	52	83	55
12....	79	56	71	60	79	58	77	61	81	61	79	62	82	60	73	63	78	60	83	55	65	60	73	59	74	61	75	54
13....	73	59	76	60	78	58	78	56	85	61	85	68	82	63	84	63	84	62	82	60	76	59	80	63	70	60	81	62
14....	81	61	81	65	75	54	82	59	84	50	83	56	80	56	82	60	84	58	83	61	77	59	83	63	82	62	83	64
15....	81	56	79	64	76	48	86	53	92	47	80	62	84	56	83	60	85	57	90	58	83	56	76	62	80	64	73	63
16....	69	55	66	60	56	40	76	58	66	61	71	64	66	47	67	55	69	58	70	60	63	61	67	61	64	56	71	62
17....	66	52	61	51	45	37	62	51	54	49	61	54	50	43	56	49	59	42	60	48	55	54	60	57	60	58	62	59
18....	54	42	55	47	56	36	60	40	64	41	68	41	62	39	64	43	65	44	69	39	57	43	64	46	60	48	65	48
19....	59	38	58	47	64	43	59	40	65	47	74	53	75	48	60	49	74	50	77	40	56	42	68	48	64	37	73	49
20....	75	50	74	53	74	48	74	49	67	49	76	55	78	53	73	52	77	52	79	54	67	52	76	51	71	46	74	53
21....	78	56	77	60	78	50	79	59	83	53	78	58	82	62	78	59	80	50	83	49	72	60	76	57	78	54	78	57
22....	73	52	67	57	62	43	77	50	71	52	76	60	68	48	70	55	74	48	74	53	65	55	72	60	74	57	77	63
23....	69	41	66	50	72	37	72	41	76	41	76	45	78	44	71	52	75	46	78	46	75	42	75	46	73	42	75	50
24....	76	53	76	58	79	48	80	50	87	47	61	49	84	53	79	55	81	49	83	48	75	50	81	48	80	48	81	50
25....	76	51	76	62	71	53	79	58	73	49	78	52	75	56	73	61	78	56	74	57	73	53	81	48	78	52	82	52
26....	76	57	75	66	79	62	79	55	80	61	85	58	85	65	78	65	74	68	72	63	77	68	79	62	76	58	83	61
27....	75	58	73	62	75	54	78	58	76	60	79	69	75	58	71	65	75	64	83	62	74	62	71	65	66	60	77	70
28....	79	62	79	60	70	52	73	62	65	60	82	69	75	58	75	61	68	65	74	67	82	64	82	65	80	60	82	66
29....	70	55	69	55	57	49	64	55	67	57	71	60	64	55	69	53	72	56	80	56	72	62	74	64	78	62	76	65
30....	58	50	64	53	79	44	64	50	73	47	78	50	79	48	70	48	74	50	80	51	67	51	71	48	62	52	74	52
Mns..	70.8	51.2	69.5	55.6	68.5	46.9	73.3[f]	51.2[f]	72.3	50.4	74.0	54.0	72.5	51.6	70.9	54.6	73.6	52.5	75.1	51.8	68.6	53.0	72.5	53.6	71.6	52.1	74.0	55.0

Date.	Mississippi.						Louisiana.																			
	Kosciusko.§§		Natchez.§§		Vicksburg.		Alexandria.§§		Baton Rouge.§§		Covington.§§		Lafayette.§§		Lake Charles.§§		Monroe.§§		New Orleans.		Robeline.§§		Schriever.§§		Shreveport.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	79	54	83	62	80	58	80	62	83	67	83	65	81	66	76	48	77	50	82	69	75	60	85	59	76	51
2.....	60	56	60	52	60	50	65	50	69	55	70	58	70	57	74	49	58	49	74	55	69	47	85	52	60	46
3.....	71	38	72	40	68	46	77	42	74	45	79	45	74	44	75	39	75	45	69	51	72	35	83	46	70	45
4.....	75	43	77	49	75	53	80	42	75	48	80	44	77	46	70	40	76	55	72	56	73	42	85	45	75	50
5.....	79	54	77	55	75	55	79	47	79	54	79	45	79	50	77	40	77	49	76	55	77	44	81	46	76	58
6.....	69	55	77	63	73	63	77	57	78	60	80	51	79	59	79	42	74	58	78	62	79	38	84	47	67	62
7.....	57	50	78	52	67	52	60	55	72	61	72	64	67	65	66	50	58	52	76	56	71	51	82	46	65	53
8.....	67	42	70	48	66	47	72	50	68	50	70	51	68	50	66	47	72	45	65	51	68	43	81	50	68	46
9.....	75	40	69	48	69	51	67	49	79	51	75	48	71	52	64	48	71	48	73	57	64	44	77	51	63	51
10.....	74	50	77	60	72	56	86	50	80	62	76	50	79	58	75	56	75	54	78	64	73	44	82	64	73	55
11.....	85	56	81	63	80	62	85	62	82	63	80	65	79	64	77	59	82	57	78	65	85	55	85	61	82	63
12.....	74	60	68	65	72	60	75	65	74	67	73	63	84	65	78	61	76	60	77	62	77	61	87	65	79	63
13.....	81	61	82	62	81	63	85	62	78	64	80	62	88	65	87	62	83	62	83	63	89	61	87	64	82	64
14.....	82	62	81	64	81	66	90	64	83	66	80	63	89	67	88	64	85	62	78	68	88	59	86	65	85	62
15.....	68	67	87	70	71	62	85	70	80	68	78	66	80	70	78	65	69	65	82	67	81	66	82	69	81	66
16.....	66	60	73	64	71	62	80	63	74	71	76	66	74	68	72	68	72	62	79	66	76	68	80	73	76	57
17.....	73	61	73	62	67	54	77	60	75	60	79	65	78	64	81	58	72	57	76	66	71	55	82	60	64	50
18.....	67	46	72	48	66	50	80	48	76	51	78	53	79	53	76	48	72	52	73	58	72	42	79	55	68	46
19.....	73	47	80	50	73	53	86	49	79	56	84	54	81	54	81	50	78	50	78	59	80	42	84	54	76	54
20.....	72	49	76	56	69	56	82	56	82	60	75	56	83	58	80	57	70	57	77	65	75	52	81	59	70	58
21.....	79	54	84	60	77	60	82	60	78	65	82	57	86	63	81	61	76	59	83	74	82	59	82	67	77	62
22.....	79	63	82	64	76	62	85	70	80	67	89	65	82	71	84	62	78	57	84	71	80	65	89	69	77	50
23.....	74	46	84	60	75	55	82	55	77	55	85	58	78	56	80	55	77	56	76	63	81	44	82	58	78	54
24.....	81	47	81	58	80	55	84	53	81	53	85	50	81	54	82	52	82	56	75	61	82	44	86	52	80	57
25.....	82	50	82	57	83	57	80	53	83	61	83	53	81	61	79	56	80	58	80	62	78	48	89	54	77	62
26.....	82	60	86	67	83	68	86	62	84	69	89	60	83	66	84	59	84	60	85	71	85	60	89	62	82	72
27.....	82	68	90	70	84	66	91	73	86	71	89	73	88	74	85	69	86	71	85	70	89	70	90	73	85	71
28.....	85	64	84	71	84	64	85	73	79	74	87	72	89	73	85	68	81	71	84	70	83	70	91	69	82	69
29.....	78	63	85	65	76	64	85	64	83	66	88	68	88	66	86	61	76	65	86	61	79	62	89	71	70	59
30.....	76	57	80	57	75	58	86	56	85	59	85	59	88	57	86	52	76	56	80	66	86	48	88	59	80	54
Mns.....	74.8	53.9	78.4	58.7	74.3	57.6	80.5	57.4	78.5	60.6	80.3	58.3	80.1	60.5	75.1	55.2	75.6	56.6	78.1	62.8	78.0	52.6	84.4	59.0	74.8	57.3

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 8, TEXAS AND RIO GRANDE VALLEY.

B. BUNNEMEYER, District Editor.

GENERAL SUMMARY.

April added largely to the temperature deficiency that had accumulated during the preceding five months, and in the western portion of the district the current month was the coldest April of record. In the Texas portion, however, the deficiency of temperature was much less pronounced, and in portions of west Texas there was even a slight excess. Light to killing frosts occurred at frequent intervals throughout the month in New Mexico and Colorado, but the persistently cold weather had so delayed vegetation that their effect was much less harmful than it ordinarily would have been. The precipitation for the district as a whole averaged about normal. Moderate excesses occurred in the upper and middle Rio Grande Valley and in east Texas, while the deficiency was most marked in the Rio Pecos Valley and in west Texas. The snowfall was unusually heavy in the northern mountain districts, the greatest monthly fall being 108 inches at Anchor Mine, N. Mex. In the extreme upper reaches of the Rio Grande at an altitude of about 9,300 feet the average depth of snow at the close of the month was 15 inches, which is greater than usual so late in the season. Tornadoes and destructive local storms occurred in portions of Texas during the latter half of the month, killing several persons and causing considerable loss of property. Special reference has been made to the more severe storms in another part of this summary.

The precipitation was quite evenly distributed throughout the month, measurable amounts occurring daily in some portion of the district. The number of cloudy and rainy days was somewhat greater than normal. The number of days with 0.01 inch or more of precipitation averaged 6 in Colorado and Texas and 5 in New Mexico.

The monthly amounts of precipitation ranged in Colorado from 3.64 inches at Platoro to 0.05 inch at Garnett; in New Mexico from 7.30 inches at Anchor Mine to 0.03 inch at Rio Grande Industrial School, and in Texas from 9.37 inches at Beaumont to 0.17 inch at Theodore. Amounts of 2.50 inches or more in 24 consecutive hours occurred at 13 stations in Texas, the heaviest being 6 inches at Matagorda on the 9th.

TEMPERATURE.

The temperature deficiency averaged 3.6° in Colorado, 4.3° in New Mexico, and 0.6° in Texas. In the western portion of the district there were but 4 or 5 days with daily mean temperatures above the normal, but in the eastern portions the warm and cold periods were about equally divided as to duration. The extremes of temperature were not unusual to the season, and the average diurnal range of temperature varied from about 7° on the Texas coast to about 36° in the middle Rio Pecos Valley. The lowest temperatures occurred at most stations on the 2d or 3d, although the 7th, 8th, 14th, 17th, 22d, and 23d were also abnormally cold, while the highest temperatures occurred generally from the 24th to 30th. The nights especially were cold in the greater portion of the district.

The highest and lowest temperatures reported were: In Colorado, 70° at Saguache on the 24th and 29th and −12° at Hermit on the 22d; in New Mexico, 96° at Carlsbad on the 30th and 4° at Chama on the 14th, and in Texas 100° at 5 stations on several dates in the last decade and 27° at Valentine on the 2d and at Sonora on the 4th. The local monthly means ranged from 23.4° to 41° in Colorado, from 32.6° to 60.8° in New Mexico, and from 56.9° to 76.6° in Texas.

PRECIPITATION.

The average monthly precipitation for the Rio Grande watershed was 1.03 inches, which is 0.03 inch greater than the normal. The excess was greatest in the extreme upper portion of the watershed and less marked in southern New Mexico, while a decided deficiency occurred over a long stretch from Tres Piedras, N. Mex., to Mountainair, N. Mex. Over the Texas stretch the amounts averaged slightly less than normal.

Over the Rio Pecos watershed the precipitation was deficient, the average monthly amount for the watershed being 0.59 inch, which is 0.15 inch less than the normal. The greatest monthly amount was 1.68 inches at Mineral Hill, N. Mex., and the least 0.07 inch at Boaz, N. Mex.

In the Texas watersheds the precipitation was greater than the normal over the coastal plains and from the Trinity watershed eastward to that of the Sabine, with excesses ranging from 0.06 inch for the Trinity to 2.42 inches for the Neches. The remaining Texas watersheds showed comparatively light precipitation with deficiencies ranging from 0.10 inch for the Nueces to 1.23 inches for the Lavaca. The following are the average monthly amounts in inches for the various watersheds: Nueces, 2.39; San Antonio, 1.98; Guadalupe, 2.30; Lavaca, 2.14; Colorado, 2.04; Brazos, 2.60; Trinity, 3.80; Neches, 5.60; Sabine, 5; and coastal plains, 3.76.

RIVER CONDITIONS.

The Trinity, Sabine, and Neches were well above the normal during the entire month. Sharp rises occurred in the upper Trinity from the 2d to 4th and from the 12th to 15th. The former rise gave a stage slightly above the danger mark at Dallas. From Long Lake southward the Trinity was from 10 to 25 feet above low-water mark, except during the last week of the month, when the high water was rapidly subsiding. The Sabine was slightly above flood stage on the 9th and bank full on the 13th and 14th at Logansport, La. No rises of

consequence occurred in the Brazos and Colorado, and their flow averaged about normal, while the Guadalupe was at low-water mark throughout the month; but nearly all the streams were more or less fluctuating. Advices and warnings were issued for the more important rises, and no damage resulted from the high water so far as reported.

DESTRUCTIVE LOCAL STORMS.

Hailstorm.—A violent thunderstorm, accompanied by an unusually heavy fall of hail and rain, occurred at Houston, Tex., on April 16, in connection with a general disturbance that was central over south Texas on the morning of that date. The storm came from the southwest and traveled toward the northeast. The first thunder was heard at 5 a. m. and the last at noon. Thunder and lightning were incessant, and the accompanying precipitation broke all previous records. The total amount from this storm was 4.70 inches, of which 1.24 inches fell in 45 minutes, from 7 a. m. to 7.45 a. m., and 2.82 inches in two hours, from 9.34 a. m. to 11.34 a. m., flooding streets and interrupting traffic and car service.

From 6.55 a. m. to 7 a. m. and again from 7.40 a. m. to 7.45 a. m. there was an unusually heavy fall of hail. The hailstones varied in size from an ordinary playing marble to a walnut, but many were considerably larger. The larger ones, however, consisted of two or more pellets frozen together. In shape, the single stones were round, flattened or with indentations at opposite ends, while those frozen together were very irregular, with sharp edges and points projecting in various directions.

The barograph showed strong fluctuations, and the thermograph a drop of 10°, from 70° to 60°, during the first fall of hail. The direction of the wind was variable and the oscillations of the vane were mostly from south or southwest to northwest or north and back again to south. The hail in each instance began while the wind was in the southwestern quadrant. The maximum velocity of the wind recorded was at the rate of 26 miles per hour from the south at 6.05 a. m. A greater velocity occurred probably later as the wind was gusty, but the automatic record was lost because the hail disabled the anemometer. The dial showed a total wind movement of 10 miles from 6 to 7 a. m. and of 11 miles from 7 to 8 a. m. and less than that during the other hours of the forenoon.

Much damage was done by the hail to gardens, shrubs, and flowers, and streets and sidewalks were littered with leaves and branches of trees. The loss from broken window panes probably exceeds $10,000 in the aggregate. At the Weather Bureau office the sunshine recorder was broken and the anemometer damaged.

Tornadoes.—On the afternoon of April 20 tornadoes with characteristic pendant funnel-shaped clouds occurred in north Texas in Parker, Wise, Denton, and Cooke Counties. These storms occurred in the southeastern quadrant of a general disturbance that was central over Colorado on the morning of the 20th and moving in a northeasterly direction. They came from the southwest and went toward the northeast, and their paths of great destruction are variously estimated at from 100 yards to one-half mile in width. At Dan, a community 14 miles north of Decatur, Wise County, 11 residences, 1 church, and 1 barn were demolished and several horses and cows were killed. Near Greenwood, in the same county, 13 houses were blown away, and 3 miles south of Rosston, Cooke County, 15 buildings suffered the same fate. There were no deaths in these localities, as the inhabitants sought refuge in their storm cellars. At Elizabeth, Denton County, 1 person was seriously injured and 8 houses were demolished, while at Flour Mound, 12 miles east of Elizabeth, 1 child was instantly killed, 1 grown person and 2 children were seriously injured, and 5 houses destroyed. Near Agnes, Parker County, 1 grown person and 3 children were killed, 3 persons badly injured, 4 houses destroyed, and several others damaged, and an iron bridge at Salt Creek was torn to pieces.

Several tornadoes occurred in the northeastern portion of Rusk County during the afternoon of April 28. A general disturbance was central over Oklahoma on the morning of that date moving northeastward. At Church Hill 2 persons were killed and 2 seriously injured and 11 houses were demolished and 2 schoolhouses torn to pieces. At Tatum a woman and her small child, after having their home demolished, were carried about 500 yards by the storm and mortally injured, while 6 other persons were seriously hurt. Twelve business houses in this town were either demolished or badly damaged, and out of 40 residences only a dozen escaped injury. Other buildings wrecked were 2 churches, a large gin house, the railway depot, and a bank. The storm traveled in a northerly direction from Tatum, leaving a trail of wreckage and broken trees for a distance of about 5 miles.

Destructive windstorms.—On April 20 a severe windstorm in the vicinity of Copperas Cove, Coryell County, destroyed 3 houses, 1 windmill, and 1 barn, and damged several other buildings. In the vicinity of Taylor, Williamson County, 1 man was killed and his wife seriously injured and 15 to 20 shanties were blown down. At the Weather Bureau office at Taylor the wind attained an extreme velocity of 50 miles per hour from the north. At Granger, Williamson County, several houses were blown from their foundations.

TABLE 1.—*Climatological data for April, 1912. District No. 8, Texas and Rio Grande Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Colorado.																			
Blanca	Costilla	7,865	3								2.02		0.43	17.2	7	13	14	3	sw.	Dr. L. C. Audrain.
Cumbres	Conejos	10,015	5																
Garnett	Costilla	7,576	19	38.6	− 3.1	68	30	10	1	45	0.05	− 0.34	0.05	0.5	1	10	18	2	nw.	Chas. Speiser.
Hermit	Hinsdale	9,843	5	23.4		53	7	− 12	22	56	1.49		0.50	17.0	5	11	5	14		Marion Mason.
La Veta Pass	Costilla	9,000	2								1.47		0.38	15.4	5	5	16	9	w.	Clara M. Wright.
Manassa	Conejos	7,700	6	38.2		67a	30	11a	14	43	0.37		0.30		2	14a	8a	7a	sw.	J. B. Chapman.
Platoro	do	7,675	5								3.64		0.77	41.9	14	10	5	15	sw.	Walter R. Hook.
Saguache	Saguache	7,740	20	41.0	− 2.5	70	24†	15	22	46	1.11	+ 0.61	0.80	12.3	5	6	2	22	s.	Eugene Williams.
San Luis	Costilla	7,794	21	40.2	− 2.3	66	30	13	21	44	1.16	+ 0.30	0.45	11.6	8	17	13	0	sw.	P. B. Albright.
Wagon Wheel Gap Experiment Station.	Mineral	9,235	1	29.5	− 6.3	53	30	6	21	36	1.16	+ 0.19	0.42	15.5	12	7	13	10	ne.	U. S. Weather Bureau.
New Mexico.																			
Agricultural College	Dona Ana	3,863	51	55.3	− 5.9	85	30	31	21	44	0.80	+ 0.61	0.46	0	2	14	15	1	w.	New Mexico Agricultural College.
Alamogordo (near)	Otero	4,338	15	55.8	− 3.7	90	30	25	1	46	0.56	+ 0.02	0.47	0	3	12	14	4	sw.	Herbert Crippen.
Alamogordo	do	4,320	3								0.50		0.26	0	3					Agent E. P. & S. W. R. R.
Alamos Ranch	Sandoval	7,800	2								0.67		0.32		8	19	3	8	sw.	H. H. Brook.
Albuquerque	Bernalillo	5,000	36								0.13	− 0.37	0.06	0	3	23	6	1	w.	Pitt Ross.
Ancho	Lincoln	6,112	3								0.33		0.33	T.	1					Agent E. P. & S. W. R. R.
Anchor Mine	Taos	10,600	1								7.30		2.00	108.0	17	5	10	16	w.	C. H. Brigham.
Artesia	Eddy	3,350	4	58.3		94	30	28	2	54	0.09		0.07	0	2	20	4	6	sw.	Will Benson.
Aspen Grove Ranch	Rio Arriba	9,000	3								1.69		0.60	17.0	9	9	20	1		J. D. Maupin.
Banks	Roosevelt										0.62		0.41	T.	2	25	2	3	w.	Aaron Hawkins.
Batemans Ranch	Rio Arriba	8,900	3								1.11		0.40	13.4	7	8	15	7	w.	J. W. Bateman.
Berino	Dona Ana	3,788	1								1.30		1.07	0	3					J. C. Rishaberger.
Bluewater	Valencia	6,732	10	42.9	− 4.5	75	30	19	2	45	0.67	+ 0.31	0.30	3.0	4	9	19	2	nw.	Bluewater Development Co.
Boaz	Chaves	4,154	3	55.4		85	30	24	2	50	0.07		0.03	0	3	15	15	0	w.	D. C. Savage.
Capitan	Lincoln	6,348	3								0.77		0.55	4.1	3	8	8	14	n.	Agent E. P. & S. W. R. R.
Carlsbad	Eddy	3,120	17	60.8	− 2.7	96	30	30	3	52	0.54	− 0.17	0.32	0	3	23	3	4	sw.	U. S. Reclamation Service.
Carrizozo	Lincoln	5,429	4	50.0		82	29†	28	2	41	0.56		0.38	T.	2	19	3	8	s.	Agent E. P. & S. W. R. R.
Cerrillos (near)	Santa Fe	5,700									0.50		0.18	1.0	6	12	12	6	w.	Irving C. Sweet.
Chama	Rio Arriba	7,851	14	36.6	− 5.3	65	30	4	14	40	2.39	+ 0.84	0.49	32.0	8	16	12	2	sw.	Frank C. Johnson.
Cloudcroft	Otero	8,650	10	39.8	− 2.0	67	22	14	13	29	0.59	− 0.23	0.54	6.5	2				sw.	Agent E. P. & S. W. R. R
Corona	Lincoln	6,666	3			74	30	26	12		0.44		0.30	1.0	3	16	9	5	sw.	Do.
Coyote	do	5,800	3								0.37		0.27	0	5	19	1	10	sw.	Do.
Cundiyo	Santa Fe	6,889	3								0.76		0.24		6	14	14	2	w.	Juan Vijil.
Demonstration Farm	San Miguel	6,800	3								0.54		0.20	1.0	4					Erb & Westerman.
Duran	Torrance	6,272	3								1.48		0.50	3.0	5	20	5	5		Agent E. P. & S. W. R. R.
Escondido	Otero	4,014	3			89	30				0.95		0.54	0	3	25	3	2	sw.	Do.
Espanola	Rio Arriba	5,590	14	46.9	− 3.3	77	30	21	2†	41	0.45	− 0.35	0.13	0	5	10	13	7	s.	Mrs. E. F. McBride.
Estancia	Torrance	6,140	7					29	1											Agent N. M. Centl. R. R.
Fort Stanton	Lincoln	6,231	35	48.0	− 3.2	80	30	17	2	49	0.69	+ 0.07	0.27	1.5	7	20	4	6	w.	U. S. Sanitarium.
Fort Sumner	Guadalupe	3,960	4																	F. A. Manzanares.
Gallinas	Lincoln	6,635	3								1.38		0.68	0	5	15	8	7	w.	Agent E. P. & S. W. R. R.
Gallinas Planting Sta.	San Miguel	7,500	5	40.9		72	30	17	2	41	0.55		0.35	4.0	3	13	13	4	w.	U. S. Forest Service.
Glorieta Ranch	Socorro	5,700	2								0.81		0.52	8.0	6	20	4	6	s.	C. M. Crossman.
Harveys Upper Ranch	San Miguel	9,400	3								1.24		0.16	24.8	12	15	15	0	se.	S. B. Warner.
Hillsboro	Sierra	5,224	14																	Dr. F. I. Givens.
Hondo Reservoir	Chaves	3,904	3	56.0		92	30	27	2†	49	0.23		0.09	0	5	22	5	3	sw.	U. S. Reclamation Service.
Jemez Springs	Sandoval	6,100	2	45.2		75	30	26	22	37	1.15		0.50	3.0	9	8	10	12	sw.	L. L. Shields.
Knowles (near)	Eddy	4,300	2	56.6		94	30	28	2	59	0.35		0.17	0	5	19	7	4	sw.	J. W. Mosley.
Laguna	Valencia	5,840	7	47.2		77	29	25	2†	41									w.	Gus Weiss.
Lagunita	Guadalupe	4,500	7																	P. A. Turnbull.
Lake Valley	Sierra	5,412	7								1.50		1.05	4.0	5	17	10	3	w.	Wm. P. Keil.
Lakewood	Eddy	3,170									0.12		0.09	0	2	23	2	5	se.	Miss J. Knapp.
Las Vegas	San Miguel	6,385	25	43.9	− 5.5	74	30	18	2	41	0.70	− 0.28	0.19	T.	6	20	9	1	sw.	New Mexico Normal Univ.
Liston	Chaves	5,000	2								0.65		0.31	0	4	14	16	0	sw.	H. G. Liston.
Los Lunas (near)	Valencia	4,900	23	51.1	− 5.0	86	30	25	2	50	0.18	− 0.45	0.18	0	1	11	18	1		Richard Pohl.
Magdalena	Socorro	6,557	7	45.2		75	29†	19	13	42	1.06		0.25	T.	7	15	11	4	w.	William Pender.
Mescalero	Otero	6,627	1	44.6		74	30	16	13	37	0.81		0.56	1.0	4	21	1	8	sw.	Rev. R. H. Harper.
Mineral Hill	San Miguel	7,050	7								1.68		0.74	7.5	4	0	26	4	sw.	W. M. Nelson.
Monterey	Otero	4,436	3			84	30	30	13		0.63		0.48	1.0	2	15	14	1	sw.	Agent E. P. & S. W. R. R.
Mountainair	Torrance	6,547	10	46.4	− 2.9	81	30	19	2	48	0.24	− 1.22	0.18	1.0	3	15	10	5	sw.	Miss Julia Hill.
Newman	Otero	3,989	3								1.32		1.20	0	2	15	14	1	w.	Agent E. P. & S. W. R. R.
Noria	Dona Ana	4,114	3			88	30				1.05		1.05	2.0	1	22	5	3	w.	Do.
Orogrande	Otero	4,171	3			92	30	32	1		0.52		0.34	T.	2	19	7	4	w.	Do.
Oscura	Lincoln	5,016	3								0.90		0.39	0	7					Eugene F. Jones.
Otis	Eddy	3,100	3								0.69		0.25	0	4	25	3	2	se.	A. M. Hove.
Otto	Santa Fe	6,200	3								1.02		0.49	1.2	9					Otto Goetz.
Pastura	Guadalupe	5,285	3								0.33		0.18	T.	3	16	9	5	w.	Agent E. P. & S. W. R. R.
Placitas (near)	Bernalillo	8,000	1	39.6		70	30	22	1†	32	0.87		0.24	8.0	7	12	13	5	e.	George C. Ellis.
Plainview	Chaves	4,300	1																	L. P. Adair.
Red River Canyon	Taos	8,965	5	38.8		68	30	19	1	39	3.71		0.68	47.0	11	12	16	2	e.	Mrs. L. R. Penn.
Rincon	Dona Ana	4,030	18	55.2	− 4.1	88	30	27	1	48	0.94	+ 0.74	0.73	T.	2	11	7	12	w.	Charles H. Raitt.
Rio Grande Dam	Sierra	4,265	22	54.6	− 4.2	86	30	32	2†	46	1.07	+ 0.67	0.88	0	3	23	6	1	w.	U. S. Reclamation Service.
Rio Grande Industrial School.	Bernalillo	5,000	1	49.0		83	30	23	13	49	0.03		0.02	0	2	13	9	8	sw.	Rev. A. C. Heyman.
Rosedale	Socorro	6,910	7	44.2		75	30	22	13	36	1.58		1.00	7.0	6	16	11	3	w.	Mrs. J. J. McInness.
Roswell	Chaves	3,578	18	56.4	− 4.2	91	30	28	2	49	0.15	− 0.34	0.11	0	4	19	8	3	s.	U. S. Weather Bureau.
San Marcial	Socorro	4,439	15	53.6	− 5.5	82	27	20	2	48	0.45	+ 0.20	0.15	0	5	23	4	3	e.	Agent A., T. & S. Fe R. R.
San Rafael	Valencia	6,509	15	46.9		82	30	22	2†	48	0.60	− 0.25	0.21		6	16	3	11	nw.	Dr. Chas. M. Grover.
Santa Fe	Santa Fe	7,013	30	42.3	− 5.3	72	30	20	2	33	0.43	− 0.43	0.13	1.3	10	11	18	1	sw.	Section Center.
Santa Fe Canyon	do	8,000	2								0.96		0.30	3.0	8	13	3	14	w.	C. Martinez.
Santa Rosa	Guadalupe	4,624	11	51.6		85	30	25	2	44	0.47	− 0.05	0.22	T.	5	9	7	14	w.	H. V. B. Smith.
Socorro	Socorro	4,600	20	55.6	− 2.1	88	30	27	2	54	0.84	+ 0.16	0.55	0	5	26	4	0	s.	J. J. Leeson.
Stanley	Santa Fe	6,317	3	44.2		78	30	18	22	46	0.69		0.36	0.5	6	8	22	0	w.	George R. Camp.
Strauss	Dona Ana	4,080	13								0.91	+ 0.63	0.61	T.	2	22	2	6	w.	Agent So. Pac. R. R.
Tajique (near)	Torrance	9,820	2								1.19		0.34	13.0	7	13	3	14		A. Rea.
Taos	Taos	6,983	17	43.6	− 4.5	71	30	20	2	45	0.93	− 0.02	0.28	T.	9	14	15	1	w.	Alex. Gusdorf.
Taos Canyon	do	8,959	3								1.14		0.24	14.2	9	15	5	10		L. Martinez, jr.
Tecolote	Lincoln	6,539	3								0.21		0.18	T.	3	17	5	8	w.	Agent E. P. & S. W. R. R.
Three Rivers	Otero	4,559	3			83	30	32	1		0.49		0.25	0	2	17	8	5	sw.	Do.
Tijeras Canyon	Bernalillo	6,214	2								0.39		0.25	T.	3	15	8	7	sw.	U. S. Forest Service.
Torrance	Torrance	6,433	3			72	29†	20	2		0.51		0.30	2.0	4	22	3	5	sw.	Agent E. P. & S. W. R. R.
Tres Piedras	Taos	8,076	9	37.8		66	30	17	2†	36	0.67	− 0.59	0.28	2.5	5	12	6	12	sw.	U. S. Forest Service.

TABLE 1.—*Climatological data for April, 1912. District No. 8*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
New Mexico—Contd.																				
Truchas	Rio Arriba	7,935	3	38.0	.....	68	30	19	1	34	1.26	.....	0.22	15.1	9	3	18	9	w.	Miss Ruth Rendon.
Tularosa	Otero	4,436	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	I. L. Fairless.
Vaughn	Guadalupe	5,952	3	.....	.....	74	28†	28	24†	.....	.....	.....	.....	.....	5	25	2	5	sw.	Agent E. P. & S. W. R. R.
Virsylvia	Taos	7,500	2	44.9	.....	66	26	20	13	31	2.23	.....	1.73	9.2	10	17	9	4	s.	Dr. I. N. Woodman.
Winsors	San Miguel	8,200	16	32.6	− 7.1	60	24	14	2	35	1.25	− 0.15	0.30	12.5	8	6	24	0	s.	James F. Matty.
Texas.																				
Abilene	Taylor	1,738	27	64.4	0.0	90	30	39	17	33	2.30	+ 0.02	0.86	0	7	10	5	15	s.	U. S. Weather Bureau.
Albany	Shackelford	1,429	18	62.2	− 1.8	90	30	30	1	47	1.32	− 0.71	0.51	0	4	20	0	10	.....	N. L. Bartholomew.
Alice	Jim Wells	200	1	71.4	.....	95	26	39	3	36	2.12	.....	1.27	0	6	5	8	17	se.	R. M. Boerum.
Alpine	Brewster	4,482	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Frank Dobie.
Alvin	Brazoria	49	14	69.2	.....	88	28	40	3	31	5.44	+ 2.05	2.80	0	4	7	14	9	se.	Alvin Japanese Nursery.
Anahuac	Chambers	23	3	.....	.....	.....	.....	.....	.....	.....	5.27	.....	3.00	0	6	.....	.....	.....	.....	B. H. Collins.
Antelope	Jack	.....	1	.....	.....	.....	.....	.....	.....	.....	2.37	.....	0.88	0	4	15	9	6	.....	Paul Rudolph.
Aspermont	Stonewall	.....	1	.....	.....	.....	.....	.....	.....	.....	0.39	.....	0.19	0	3	21	2	7	s.	Bryant Link Co.
Austin	Travis	593	56	67.2	− 0.7	87	21	48	18	28	1.76	− 1.41	0.66	0	9	15	6	9	se.	A. Deussen.
Ballinger	Runnels	1,637	16	65.2	+ 0.3	95	30	34	3	44	1.35	− 0.98	0.86	0	4	12	5	13	s.	E. M. Eubank.
Barstow	Ward	2,573	5	64.6	.....	98	29	33	2	54	0.30	.....	0.20	0	2	21	6	3	e.	Lee F. Freeman.
Bay City	Matagorda	53	2	69.4	.....	88	29	44	3	32	3.22	.....	1.17	0	6	7	3	20	se.	E. C. Quereau.
Beaumont	Jefferson	29	11	69.0	+ 0.2	86	24	44	3	30	9.37	+ 6.42	4.12	0	13	11	0	19	se.	John Bender.
Beeville	Bee	225	16	71.4	+ 0.8	92	28	44	3	28	3.18	+ 0.56	1.62	0	10	8	6	16	e.	L. E. Dickey.
Big Springs	Howard	2,396	14	65.4	+ 0.9	99	30	38	17	43	0.55	− 1.12	0.32	0	5	15	9	6	s.	B. Reagan.
Blanco	Blanco	1,350	16	64.6	+ 1.2	85	29	33	3	40	3.73	+ 0.21	2.14	0	9	9	17	4	s.	R. C. Crist.
Boerne	Kendall	1,412	20	66.3	+ 0.3	90	21	41	2	35	2.73	− 0.81	1.23	0	12	14	3	13	n.	F. W. Schweppe.
Booth	Fort Bend	81	11	.....	.....	.....	.....	.....	.....	.....	4.66	+ 1.43	2.10	0	9	10	0	20	e.	T. R. Booth.
Bowie	Montague	1,113	17	64.0	− 0.1	89	30	40	2†	37	2.31	− 0.75	0.72	0	7	16	5	9	n.	Craig Anderson.
Brady	McCullough	1,500	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. W. Griffin.
Brazoria	Brazoria	25	23	69.3	+ 0.1	86	29	39	3	28	4.36	+ 0.82	1.26	0	10	11	10	9	s.	Mrs. M. A. Stevens.
Brazos	Palo Pinto	801	3	.....	.....	.....	.....	.....	.....	.....	1.94	.....	0.62	0	4	17	8	5	s.	Robt. E. Boyett.
Brenham	Washington	350	27	67.5	− 1.3	87	30	45	3	28	4.24	+ 0.59	1.78	0	11	9	4	17	se.	Mrs. B. F. Sloan.
Bridgeport	Wise	754	3	.....	.....	.....	.....	.....	.....	.....	2.71	.....	0.65	0	10	15	6	9	s.	Claude Strange.
Brighton	Nueces	12	19	71.0	− 0.3	90	16	50	3	25	3.55	+ 1.66	2.00	0	4	16	8	6	e.	G. H. Ritter.
Brownsville	Cameron	38	48	74.8	+ 1.1	97	21	52	3†	32	1.76	+ 0.45	1.26	0	3	.....	.....	.....	se.	U. S. Weather Bureau.
Brownwood	Brown	1,342	20	65.3	0.0	90	12†	36	3	45	1.84	− 2.01	0.60	0	6	7	18	5	s.	Mrs. Pearl Smith.
Cameron	Milam	.....	4	68.0	.....	91	30	40	2	39	1.90	.....	1.13	0	8	17	9	4	s.	J. E. Watts.
Carmona	Polk	330	4	68.1	.....	88	13	35	3	51	3.44	.....	1.45	0	7	11	5	14	s.	M. S. Spitler.
Carrizo Springs	Dimmit	.....	4	69.8	.....	92	20†	39	7	40	1.50	.....	1.10	0	5	19	0	11	se.	M. E. Cook.
Claytonville	Fisher	2,100	17	64.0	+ 0.3	91	25	40	2	38	1.89	− 0.10	0.93	0	6	11	11	8	s.	Wm. Lanius.
Clifton	Bosque	671	1	.....	.....	.....	.....	.....	.....	.....	2.03	.....	0.69	0	7	5	15	10	s.	R. M. Jones.
Coleman	Coleman	1,710	18	68.2	+ 4.2	98	30	40	2†	50	0.87	− 1.70	0.33	0	7	7	20	3	s.	J. E. Stevens.
Collegeport	Matagorda	.....	.....	68.2	.....	87	26	38	3	34	.....	.....	.....	.....	.....	10	4	16	se.	H. A. Clapp.
College Station	Brazos	308	22	68.6	− 1.5	87	14†	45	4	34	2.11	− 1.26	1.49	0	8	9	4	17	s.	Prof. G. S. Fraps
Colorado	Mitchell	2,066	18	63.9	− 0.9	96	31	35	3	45	1.11	− 1.79	0.55	0	3	18	10	2	s.	R. M. Webb.
Columbia	Brazoria	34	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. B. Loggins.
Columbus	Colorado	206	8	.....	.....	.....	.....	.....	.....	.....	4.16	.....	1.60	0	8	7	5	18	ne.	Mrs. Sophie Bridge.
Corpus Christi	Nueces	20	25	70.2	− 0.7	88	16	53	8	19	1.57	− 0.23	1.10	0	9	3	12	15	se.	U. S. Weather Bureau.
Corsicana	Navarro	445	23	64.6	− 2.3	83	30	42	2†	30	3.75	+ 0.05	0.90	0	11	9	6	15	s.	D. H. Winn.
Cotulla	La Salle	425	5	.....	.....	.....	.....	.....	.....	.....	3.50	.....	2.10	0	2	.....	.....	.....	.....	Holland Agricultural Co.
Crockett	Houston	350	8	68.6	.....	95	26	41	3	34	5.02	.....	2.26	0	7	10	7	13	s.	A. M. Rencher.
Cuero	De Witt	177	22	67.2	− 3.2	91	26	42	3	34	2.39	− 0.65	1.68	0	9	7	2	21	s.	H. R. Frobese.
Dallas	Dallas	466	23	64.2	− 0.7	90	15	40	4	43	3.68	− 0.30	1.24	0	11	8	2	20	s.	G. A. Eisenlohr.
Danevang	Wharton	145	16	69.8	+ 0.7	88	30	41	3	35	3.20	− 0.69	1.60	0	5	14	2	14	se.	H. P. Hermansen.
Decatur	Wise	1,047	16	.....	.....	.....	.....	.....	.....	.....	1.00	− 2.27	0.60	0	2	14	11	5	.....	F. W. & D. C. Ry.
Del Rio	Valverde	952	6	69.6	− 0.4	94	30	37	3	36	1.17	− 1.77	0.87	0	8	9	14	7	se.	U. S. Weather Bureau.
Devine	Medina	653	2	70.6	.....	95	29	42	4	43	2.47	.....	1.90	0	7	13	6	11	se.	M. A. Keller.
Dialville	Cherokee	575	8	66.4	.....	85	14	44	2†	30	6.68	.....	2.65	0	10	9	8	13	s.	J. M. B. McKnight.
Dilley	Frio	569	2	.....	.....	.....	.....	.....	.....	.....	2.40	.....	1.50	0	3	.....	.....	.....	.....	John W. Miller.
Dublin	Erath	1,466	16	66.2	+ 2.8	93	14	41	3†	40	2.58	− 0.78	1.23	0	8	8	13	9	s.	Jno. O. Shafer.
Duval	Travis	820	23	67.3	− 1.4	86	30	43	3	29	3.50	− 0.27	1.19	0	8	14	6	10	se.	J. C. Edgar.
Eagle Pass	Maverick	800	35	71.6	− 0.8	96	28	40	3	36	2.12	+ 0.52	1.95	0	3	9	18	3	se.	Charles Tarver.
Eastland	Eastland	1,420	5	64.6	.....	91	26†	37	17	46	1.24	.....	0.33	0	7	10	7	13	s.	Wm. D. Cook.
Edna	Jackson	71	3	.....	.....	.....	.....	.....	.....	.....	2.11	.....	1.00	0	5	.....	.....	.....	.....	E. L. Faires.
El Paso	El Paso	3,762	33	59.1	− 4.7	86	30	36	7	38	0.96	+ 0.73	0.88	0	3	22	4	4	w.	U. S. Weather Bureau.
Encinal	La Salle	558	4	61.9	.....	89	28	40	4	41	3.65	.....	2.20	0	4	13	0	17	n.	Walter Pettit.
Eola	Concho	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. W. Neal.
Fairland	Burnet	1,000	23	67.2	0.0	89	30	35	3	39	3.30	− 0.20	1.47	0	8	12	11	7	s.	R. L. Bush.
Falfurrias	Brooks	.....	4	75.0	.....	100	26†	41	3	37	1.44	.....	0.68	0	4	15	11	4	se.	W. A. Gardner.
Flatonia	Fayette	465	4	68.8	.....	89	14	45	3†	33	1.89	.....	0.86	0	12	7	4	19	s.	Fred W. Laux.
Flint	Smith	483	2	65.5	.....	85	14	38	3	36	3.98	.....	1.19	0	12	12	3	15	s.	F. C. C. Carter.
Fort Clark	Kinney	1,050	41	67.8	− 2.3	90	29†	44	7	31	1.80	− 0.04	1.80	0	2	24	4	2	e.	Post Hospital.
Fort Davis	Jeff Davis	5,000	33	.....	.....	.....	.....	.....	.....	.....	0.42	− 0.12	0.42	0	1	.....	.....	.....	.....	T. J. Dumble.
Fort McIntosh	Webb	460	44	75.0	− 0.5	100	26	45	3†	44	1.42	− 0.37	1.12	0	2	7	9	14	e.	Post Hospital.
Fort Stockton	Pecos	3,050	15	65.2	+ 0.8	98	30	36	2	52	0.38	− 0.08	0.21	0	4	9	19	2	s.	H. H. Butz.
Fort Worth	Tarrant	670	17	64.5	− 0.8	88	15	43	3	32	3.20	+ 0.55	1.13	0	8	9	11	10	s.	U. S. Weather Bureau.
Fredericksburg	Gillespie	1,742	23	65.6	− 0.3	96	11	35	3	34	2.34	− 1.04	1.65	0	7	9	13	8	s.	Arthur Striegler.
Gainesville	Cooke	738	22	63.4	− 0.4	85	27†	36	23	43	3.30	− 0.14	1.15	0	8	.....	.....	.....	.....	J. L. Hickson.
Galveston	Galveston	69	41	68.4	− 0.3	83	29	53	7	15	4.29	+ 1.16	1.76	0	7	5	9	16	se.	U. S. Weather Bureau.
Gatesville	Coryell	795	8	65.4	.....	86	14	36	2	37	3.69	.....	1.55	0	8	18	11	1	.....	John Ryan.
Georgetown	Williamson	750	17	64.8	− 1.6	88	21	35	3	40	2.68	− 1.14	1.15	0	13	13	6	11	s.	Prof. R. F. Young.
Gonzales	Gonzales	299	7	.....	.....	.....	.....	.....	.....	.....	1.75	.....	0.65	0	7	8	3	19	s.	J. M. Johnson.
Gorham	McLennan	444	3	.....	.....	.....	.....	47	23	.....	2.52	.....	0.88	0	6	11	3	16	s.	John Gorham.
Graham	Young	1,040	13	.....	.....	.....	.....	35	2	.....	1.87	− 0.58	0.62	0	8	19	5	6	s.	C. W. Johnson.
Grand Falls	Ward	.....	2	.....	.....	.....	.....	.....	.....	.....	0.40	.....	0.25	0	3	17	7	6	.....	W. A. White.
Grand Saline	Van Zandt	399	2	.....	.....	.....	.....	.....	.....	.....	5.38	.....	1.35	0	9	7	13	10	se.	Jas. Kirk.
Grapevine	Tarrant	670	22	66.1	+ 0.6	90	15	41	2	37	5.31	+ 1.49	2.15	0	6	3[b]	14[b]	11[b]	s.	W. J. Crowley.
Greenville	Hunt	550	12	65.8	+ 1.9	87	26	43	2†	46	3.49	− 0.57	1.27	0	6	8	5	17	n.	J. P. Regan.
Halletsville	Lavaca	235	20	69.3	− 1.0	87	21	42	3	31	2.17	− 1.23	0.64	0	6	10	4	16	s.	Dr. J. E. Lay.
Hamlin	Jones	1,685	1	.....	.....	.....	.....	.....	.....	.....	1.06	.....	0.49	0	4	.....	.....	.....	.....	W. S. Carruthers.
Harlingen	Cameron	37	1	75.2	.....	100	21	51	3	31	2.98	.....	1.64	0	4	17	6	7	se.	Lindsay Waters.
Harper	Gillespie	.....	1	.....	.....	.....	.....	.....	.....	.....	1.96	.....	1.05	0	6	21	0	9	.....	Christian Fritz.
Haskell	Haskell	1,553	17	65.2	+ 0.2	100	25†	40	2†	43	1.41	− 1.16	0.53	0	5	14	8	8	n.	P. D. Sanders.
Hebbronville	Duval	.....	5	.....	.....	.....	.....	.....	.....	.....	1.63	.....	1.33	0	2	.....	.....	.....	.....	Henry Edds.
Hempstead	Waller	254	8	.....	.....	.....	.....	.....	.....	.....	3.28	.....	1.50	0	6	10	0	20	se.	J. H. Hancock.
Henderson	Rusk	500	3	.....	.....	.....	.....	.....	.....	.....	5.41	.....	1.67	0	10	11	6	13	.....	M. Kangerga.
Hewitt	McLennan	664	17	.....	.....	.....	.....	.....	.....	.....	4.06	− 0.40	1.42	0	9	.....	.....	.....	.....	I. H. Earle.

TABLE 1.—*Climatological data for April, 1912. District No. 8*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
***Texas*—Continued.**																				
Hico	Hamilton		1								5.07		1.65	0	8	19	4	7	s.	John A. Eakins.
Hillsboro	Hill	628	9	65.2		86	16	39	4	38	3.16		1.31	0	5					W. G. Escott.
Hondo	Medina	901	13	67.4		90	29†	40	3	34	3.06	+ 0.16	2.40	0	5	10	2	18	se.	H. E. Haass.
Houston	Harris	138	22	69.2	− 0.4	86	21	47	3	25	6.62	+ 2.91	4.70	0	9	7	9	14	se.	U. S. Weather Bureau.
Huntsville	Walker	400	28	66.6	− 1.2	87	14†	39	4	36	4.14	+ 0.18	2.32	0	5	11	0	19	se.	W. Y. Barr.
Jayton	Kent		2																	Wichita Valley Ry. Co.
Jewett	Leon	496	8	65.6		90	15	40	9	36	4.50		1.75	0	6	17	6	7	s.	Earle Adkisson.
Junction	Kimble	1,645	11	64.8		90	29	30	3	46	1.47	− 1.47	1.33	0	2	14	8	8	s.	Judge John S. Durst.
Kaufman	Kaufman	448	13	66.2	− 0.2	86	15	43	2†	31	4.37	+ 0.93	1.26	0	8	13	7	10	s.	B. J. Hubbard.
Kerrville	Kerr	1,650	16	65.5	0.0	87	21†	30	3	42	2.91	− 0.74	1.04	0	9	13	10	7	s.	Robert E. Horne.
Killeen	Bell			66.0		83	15†	38	3	35	4.58		1.69	0	9	10	6	14	s.	J. E. Root, jr.
Knickerbocker	Tom Green	2,050	8	65.4		90	30	34	3	43	1.40		0.79	0	5	15	12	3	s.	Jos. Tweedy.
Kopperl	Bosque	576	15								2.40	− 1.21	0.80	0	6	9	5	16		T. A. Johnson.
Lagrange	Fayette	276	2								2.77		1.82	0	9	11	3	16	se.	August Hermes.
Lamesa	Dawson	2,500	2								0.47		0.24	0	5					S. D. Austin.
Lampasas	Lampasas	1,026	20	65.4	0.0	88	29†	35	3	43	2.89	− 0.62	1.18	0	7	11	4	15	s.	Mrs. K. I. Webber.
La Parra	Willacy	38	10					54	3†		2.42	+ 0.53	1.60	0	4	22	4	4		Jno. G. Kenedy.
Laureles Ranch	Nueces	20	12								2.67	+ 0.64	2.00	0	3					Matt Cody.
Liberty	Liberty	38	8	68.8		89	26	40	3	34	7.68		3.52	0	8	11	7	12	se.	Mrs. Fannie Sneed.
Llano	Llano	1,040	21	66.4	− 2.2	88	27	37	3	38	3.12	+ 0.42	1.78	0	7	16	11	3	e.	E. W. Torrence.
Llano Grande	Hidalgo	86	4	76.6		97	21	38	3	42	2.07		1.30	0	2	15	1	14	se.	M. D. Wardlow.
Long Lake	Anderson	229	7								5.26		2.30	0	5	8	3	19	s.	Geo. W. Ellis.
Longview	Gregg	336	26	66.1	+ 0.8	87	15†	42	4	36	6.57	+ 2.18	1.45	0	11	10	5	15	ne.	C. A. Propst.
Lubbock	Lubbock		1								0.50		0.40	0	4	13	11	6	sw.	A. L. Paschall.
Lufkin	Angelina	325	5	68.1		87	14	37	3	38	5.02		2.76	0	7	17	1	12	s.	T. A. King.
Luling	Caldwell	418	23	69.6	− 0.1	90	21†	42	3	32	2.04	− 0.90	0.70	0	10	14	1	15	s.	John Carter.
McGregor	McLennan	713	2								2.84		0.90	0	4	19	1	10	s.	W. H. Whitley.
McKinney	Collin	612	10	64.0		87	15	38	3	34	6.30	+ 1.26	2.71	0	11	12	9	9	se.	H. Killingsworth.
Marathon	Brewster	4,043	2	58.8		87	30	34	2†	37	1.06		0.60	0	2	11	8	11	s.	Rev. A. P. Willis.
Marble Falls	Burnet	771	4								3.17		1.20	0	6	8	5	17		R. H. Cochran.
Marfa	Presidio		4								0.40		0.25	0	2					R. K. Colquitt.
Marshall	Harrison	375	11	66.0		85	27	38	3	36	7.17	+ 3.52	1.65	0	10	2	20	8	s.	Lee Scott.
Matagorda	Matagorda	12	2								8.21		6.00	0	3	26	1	3	se.	W. E. McNabb.
Mexia	Limestone	537	8	63.7		84	27‡	41	2†	34	3.07		1.40	0	9	4	8	18	s.	Miss Josephine Newman.
Midland	Midland		5	63.4		94	25†	36	2	46	0.29		0.10	0	4	14	10	6	sw.	W. M. Midkiff.
Mission	Hidalgo	140	2	75.9		97	21†	48	3	30	2.73		1.70	0	4	12	14	4	se.	Chas. M. Kennelly.
Mont Belvieu	Chambers	65	2								5.55		2.26	0	7	10	7	13	se.	A. R. Shearer.
Mountain View	Pecos	2,900	2																	Lucius W. Gosselin.
Mount Blanco	Crosby	2,750	23	58.6	− 1.5	93	30	32	2	44	1.21	− 0.66	0.47	0	3	13	1	16	s.	H. C. Smith.
Nacogdoches	Nacogdoches	271	13	64.8	− 0.3	89	11	37	2	34	7.46	+ 2.77	2.49	0	9	11	5	14	s.	Miss Mary Hofmann.
New Braunfels	Comal	720	23	67.6	− 1.0	87	30	40	3	30	1.51	− 1.97	1.21	0	4	9	9	12	se.	J. Giesecke.
Palestine	Anderson	510	30	65.5	− 0.4	84	14	44	2	30	4.43	+ 0.35	1.85	0	10	8	14	8	s.	U. S. Weather Bureau.
Panter	Hood	1,000	23								1.54	− 1.74	0.60	0	8					E. H. Snider.
Pearsall	Frio	629	2								1.48		0.93	0	5					Earnest De Vilbiss.
Pierce	Wharton	102	6	68.4		87	14	42	3	33	2.69		1.17	0	4	10	2	18		R. B. Pointer.
Plainview	Hale	3,370	16	56.9	− 3.0	91	30	35	2†	46	1.38	− 0.42	0.78	0	6	14	11	5	w.	J. F. Sander.
Port Arthur	Jefferson		1								4.00									Griffing Bros. Co.
Port Lavaca	Calhoun	20	11	69.2	− 0.5	86	28†	51	8	20	4.38	+ 1.21	2.22	0	4	10	10	10	s.	J. H. Bickford.
Post City	Garza	2,700	2																	W. L. Dodd.
Putnam	Callahan	1,591	1								2.35		1.00	0	5	15	9	6	sw.	S. M. Davis.
Raymondville	Cameron		1								3.73		2.55	0	4					C. H. Pease.
Ricardo	Nueces	57	3																	Al. Patterson.
Riverside	Walker	169	8								3.05		1.00	0	6	14	1	15	s.	Mrs. C. W. Higdon.
Rockland	Tyler	136	8								3.80		1.90	0	5	12	3	15	s.	Mack Dunkin.
Rockport	Aransas	12	11	70.8	+ 1.2	83	29	56	8	18	3.16	+ 1.36	2.90	0	3	6	16	8	se.	Mrs. G. Grewe.
Rossville	Atascosa	558	5	69.2		90	28	40	3	35	1.60		0.93	0	9	8	16	6	se.	W. F. M. Ross.
Runge	Karnes	308	17								2.00	− 1.52	1.10	0	3					Reiffert & Frobese.
Sabinal	Uvalde	964	8	68.7		92	29†	40	3	39	2.55		2.03	0	7	10	7	13	se.	Jas. Johnston.
Salado	Bell		2								3.37		1.09	0	6	5	5	20	s.	L. M. Crockett.
San Angelo	Tom Green	1,847	21	63.2	− 1.8	90	30	34	2†	49	1.49	− 0.38	0.90	0	4	16	8	6	s.	Sam Crowther.
San Antonio	Bexar	701	27	68.6	− 0.4	90	21	42	3	33	1.78	− 1.16	1.35	0	11	8	10	12	se.	U. S. Weather Bureau.
San Augustine	San Augustine	360	3	66.4		89	27	35	3	41	5.29		1.34	0	11	9	8	13		F. A. Wilson.
San Juanito	Hidalgo		3	76.4		100	26†	46	3	33	1.98		0.81	0	6	0	2	28	se.	J. B. McAllen.
San Marcos	Hays	588	19	66.6	− 0.4	86	21†	40	3	33	1.36	− 2.04	1.26	0	2	10	0	20	s.	Miss L. C. Ford.
San Saba	San Saba	1,712	11	64.1	− 1.7	83	27	30	3	40	3.59	+ 1.11	2.20	0	8	13	12	5	s.	Jas. Burns.
Santa Gertrudes	Nueces		12								2.41	+ 0.38	1.78	0	2					J. B. Wright, jr.
Sealy	Austin	201	1								3.12		1.56	0	8	9	1	20	s.	O. H. Albert.
Seymour	Baylor	1,320	6	65.9		94	30	40	2	36	1.53		0.80	0	3	6	0	24		S. C. Lee.
Snyder	Scurry		1	61.1		97	30	36	3†	51	0.72		0.27	0	6	18	5	7	s.	J. Allen Weaver.
Somerville	Burleson	251	3	68.2		86	21	40	3	33	2.00		1.70	0	2	18	6	6	s.	Ed. Herbst.
Sonora	Sutton	2,200	8	64.0		90	26†	27	4	46	3.55		3.30	0	2	24	1	5	s.	H. Thiers.
Spur	Dickens	2,300	1	61.0		97	30	36	2	49	1.05		0.58	0	7	16	10	4	s.	J. D. Reagan.
Stamford	Jones		1	60.4		86	25	34	2	38	2.35		1.01	0	4	16	13	1		T. A. Williams.
Stowell	Chambers		1								6.62		3.72	0	5	12	1	17	s.	Arthur Bailey.
Sugarland	Fort Bend	79	11	69.1	− 0.2	88	14	44	3	30	4.32		1.88	0	7	13	8	9	e.	Paul C. Rudat.
Sutherland Springs	Wilson	424	2								1.39		0.93	0	2					E. G. Bryan.
Taylor	Williamson	583	11	66.7	− 0.8	87	14	40	3	31	2.41	− 1.56	0.94	0	9	8	9	13	s.	U. S. Weather Bureau.
Temple	Bell	630	22	66.0	− 0.4	86	23†	45	3	35	3.79	− 0.09	1.10	0	11	10	11	9		W. Goodrich Jones.
Theodore	Winkler		2								0.17		0.07	0	5					W. B. Oates.
Thurber	Erath		2								1.55		0.65	0	6					J. K. Ball.
Tivoli	Refugio		2								2.93		2.00	0	4	5	5	20		W. H. Gisler.
Uvalde	Uvalde	937	17	70.2		95	29	37	3	44	1.60	− 0.35	1.00	0	6	5	21	4	se.	F. M. Getzendaner.
Valentine	Jeff Davis	4,421	6	57.8		89	30	27	2	50	0.61		0.51	0	2	23	4	3	sw.	Valentine Development Co.
Valley Junction	Robertson	289	12								3.45	− 0.61	1.70	0	4	17	1	12	se.	Frank Fitzpatrick.
Victoria	Victoria	187	13	70.1	− 1.2	90	28†	43	3	32	2.52	− 0.69	1.25	0	3	9	1	20	s.	C. C. Zirjacks.
Waco	McLennan	424	23	67.2	+ 0.1	88	29	40	3	32	5.38	+ 0.82	1.54	0	7	11	0	19	s.	E. H. Hall.
Waxahachie	Ellis	556	15	64.2	+ 0.2	90	15	39	3†	45	2.41	− 0.73	1.06	0	11	9	4	17	s.	C. D. Longserre.
Weatherford	Parker	864	23	63.2	− 1.4	86	26	40	3	33	2.93	− 0.09	1.30	0	10	16	3	11	s.	Miss J. Stickfort.
Wills Point	Van Zandt	524	7	63.7		84	12†	40	3	32	4.72		1.50	0	9	13	4	13	s.	W. W. Gibbard.
Winters	Runnels		1								1.12		0.60	0	3					Ed. P. Eason.

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record.
* * Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 8, Texas and Rio Grande Valley.*

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Colorado.																																
Blanca	Rio Grande																															
Cumbres	do	T.				T.	.43		.06		T.		.33	.20	T.	T.	.29	T.	T.	.37	.34					T.		T.			2.02
Garnett	do						.05					T.					T.	T.			T.					T.					0.05
Hermit	do					T.					T.	T.	.50	T.		T.		T.	.26	.28	T.	T.				.21		.24	T.		1.49
La Veta Pass	do											.21				.22	T.	.29	.37		T.				T.			T.	.38		1.47
Manassa	do	T.							T.		T.		T.				.30	T.	T.	T.	T.								.07		0.37
Platoro	do	.16			.12	.28	.18		T.		.44		.77	.22		T.	.27	T.	.15	.21	.54	.04				.09		.17			3.64
Saguache	do										.20						.80		.08	.02	.01	T.									1.11
San Luis	do	.05					.38		T.		.02		.03			T.	.03		.16			.04				T.			.45			1.16
Wagon Wheel Gap Experiment Sta.	do				T.	.04					.03	.16	.26			.01	T.	.04	.08	.28	.16	.01				.01		.08				1.16
New Mexico.																																
Agricultural College	Rio Grande					.46		.34								.06																0.80
Alamogordo (near)	do					.47		.02																								0.56
Alamogordo	do					.26		.21								.03																0.50
Alamos Ranch	do						.07						.06			T.	.32	.07	.11	.01	.02	.01										0.67
Albuquerque	do																.03	.08	.02													0.13
Ancho	do					.33						T.																				0.33
Anchor Mine	do	.50	.25			*	2.00	.12			.25		*	1.50		.50	.75	.25	.50	.09	.09	.25						*	.25			7.30
Artesia	Pecos					.02												.07														0.09
Aspen Grove Ranch	Rio Grande					.60			.10			.09	.11	.31			.08			.21	.11	.08										1.69
Banks	Pecos	T.				.21												.41														0.62
Batemans Ranch	Rio Grande					T.	.24		T.		.10		T.	.04		T.	T.	.10	.08		.08							T.	.11			1.11
Berino	do					.20		1.07	.03																							1.30
Bluewater	do				T.	.02	T.				T.		.10			T.	.30	T.	T.		.25							T.		T.		0.67
Boaz	Pecos															.02	.02	.03														0.07
Capitan	do						T.	.55				T.	T.				.14	.08														0.77
Carlsbad	do					*	.22	T.	.32								T.															0.54
Carrizozo	Rio Grande					T.	.38	T.	T.			T.						T.	.18													0.56
Cerrillos (near)	do					.01		T.	.03		T.		.06				.18	.13	.09													0.50
Chama	do					T.	.32		.24		.16		.48	.45		T.	.49	.18	.07	T.	T.	T.				T.						2.39
Cloudcroft	Pecos					.05		.54								T.																0.59
Corona	do					.04		.10					T.				.30															0.44
Coyote	Rio Grande					.27		.02	.03		.02					.03	T.	T.	T.													0.37
Cundiyo	do	.17				.10			.24					.02				.06	.17													0.76
Demonstration Fm.	Pecos					.20		.13									.12								.09							0.54
Duran	do	T.				.50	.30		.32				.16			T.	.20	T.	T.						T.							1.48
Escondido	Rio Grande					.40		.54	.01							T.																0.95
Espanolo	do	T.	T.				.12		.13		T.			T.				.02	.05	.13													0.45
Estancia	do																															
Fort Stanton	Pecos					.27	.02	.10	.13				T.				.02	.13	.02													0.69
Fort Summer	do																															
Gallinas	do					.25		.10					.10		.25	.68																1.38
Gallinas Pl't'g Sta.	do	T.				.05	.15		T.				T.	T.			.35	T.	T.	T.	T.					T.		T.				0.55
Glorieta Ranch	Rio Grande					.08		.52	.06							T.	.02	.03	.10													0.81
Harveys Upper Rh.	Pecos	.07				.12	.11		.07				T.	.09			.16	.11	.15	.07	.11					.12		.06				1.24
Hillsboro	Rio Grande																															
Hodges	do																															
Hondo Reservoir	Pecos					.09	.01	.03	.03							T.		.07														0.23
Hope	do																															
Jemez Springs	Rio Grande					.28	.02		.05				.06	.02			.50	.15	.06		.01								T.			1.15
Knowles (near)	Pecos	T.				T.	.17	.01	.03						.03	.11																0.35
Laguna	Rio Grande																															
Lagunita	Pecos																															
Lake Valley	Rio Grande					.28		1.05	T.				.05			.11	.01															1.50
Lakewood	Pecos					.03	.09									T.																0.12
Las Vegas	do	.19				.09			.14								.11	.03	T.	T.	T.				.14							0.70
Liston	do	.11				.31											.18	.05														0.65
Los Lunas (near)	Rio Grande					.18																										0.18
Magdalena	do	T.				.15		.15	T.				.03			.22	.22		.04									.25				1.06
Mescalero	do					.56		.05	.05									.15														0.81
Mineral Hill	Pecos					.74			.20									.47	T.		.27											1.68
Monterey	Rio Grande					.48		.15								T.	T.	T.														0.63
Mountainair	do					.03	.18		.03				T.	T.		T.	T.	T.														0.24
Newman	do						.12		1.20																							1.32
Noria	do			T.	T.	T.		1.05																								1.05
Orange	do																															
Orogrande	do					.18		.34																								0.52
Oscura	do					.39	.04		.11		.04					.01	.07	.24														0.90
Otis	Pecos					T.	.24	.15	.25								.05															0.69
Otto	Rio Grande	.05				.09	.49		.12		.11		.01			*	.14	.01														1.02
Pastura	Pecos	T.				.18				T.			T.			.10	.05															0.33
Placitas (near)	Rio Grande	.08			T.	.14	.02	T.	.17				.24	T.		T.	T.	T.	.10	.02	T.							T.				0.87
Plainview	Pecos																															
Red River Canyon	Rio Grande				T.	.04	.64	.32	.16				.44	T.	.42	.34	.33	.28	.24	T.								.50				3.71
Rincon	do					.21		.73								T.																0.94
Rio Grande Dam	do					.16	.03	.88										T.	T.													1.07
Rio Grande Industrial School.	do					.01											T.	T.	.02													0.03
Rosedale	do				.10	.12		1.00					T.			T.	.10	.08	.18													1.58
Roswell	Pecos	T.				.11		.02	.01							.01		T.														0.15
San Marcial	Rio Grande					.12		.06								.11		.15	.01													0.45
San Rafael	do	.05				T.	.10	.04				T.	T.	.21			T.	.10	.10									T.				0.60
Santa Fe	do	T.				.05	T.	.02	T.		.03		.05				.07	.06	.12	T.	.01				T.			.01	.01			0.43
Santa Fe Canyon	do	T.				.13	.19	.30					.04	T.			.05	.08	.03	.14												0.96
Santa Rosa	Pecos	T.				.03			.06								.14	.22		.02												0.47
Socorro	Rio Grande					.08	.06										.06	.55	.09													0.84
South Fork	do																															
Stanley	do	T.				.04	.36		.09		.03		T.			.10	.07	T.	T.													0.69
Strauss	do					.30		.61	T.																							0.91
Tajique (near)	do	.09				.12		.05					.34				.09	.20	.30													1.19
Taos	do	T.			.12	.16			.08		.03		.06	T.		.18		.01	.12	T.					T.				.17			0.93
Taos Canyon	do	.18				T.	T.		.24		T.		.20	.01		T.	.01	.03	.19	.08	T.	T.			T.			.20				1.14
Tecolote	do					.02			.01							.18																0.21
Three Rivers	do					.25		.24									T.	T.														0.49
Tijeras Canyon	do					.12	.02											.25														0.39
Torrence	Pecos					.02		.18					T.			.30						.01										0.51
Tres Piedras	Rio Grande					.28					.07					.06	.03	.18														0.67
Truchas	do	.36				.15	.15		.01		T.		.09					.22	.09	T.		.02							.17			1.26
Tularosa	do																															

TABLE 2.—*Daily precipitation for April, 1912. District No. 8*—Continued.

Stations.	Watershed.	Day of month.																											Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
New Mexico—Con.																																
Vaughn	Pecos																															
Virsylvia	Rio Grande	.05				1.73		.01			.03		.02			.06	.04	.03	.04									.22				2.23
Winsors	Pecos						.25		.10				.10	.15			.15	.10	.10										.30			1.25
Texas.																																
Abilene	Brazos	.14				T.				T.	T.	T.				.30	.56	.11	.02	.86					T.	T.			.31			2.30
Albany	do	.10				T.											.51		.21									.50				1.32
Alice	Coast								1.27	.58		.05						.05			.05					.12						2.12
Alpine	Pecos																															
Alvin	Coast	T.						1.60		1.02							2.80										.02					5.44
Anahuac	do							.29	1.00	.80				.15			3.00												.12			5.27
Antelope	Trinity	T.					T.		T.	.14						T.	.48		.87							T.		.88				2.37
Aspermont	Brazos	.19															.16	.04														0.39
Austin	Colorado	.12					.26	.66	.08	.02										.03	.05					.02			.57			1.76
Ballinger	do	T.											.86				.05	.10								T.			.34			1.35
Barstow	Pecos															.10				.20												0.30
Bay City	Colorado		.03					.05	1.05	1.17	.56						.36								T.							3.22
Beaumont	Neches		.24					.27	1.68		.41	.03	.42	.09	.06	.11	4.12	.95			.08									.91		9.37
Beeville	Coast	T.	.02					.15	.93	1.62	.04		.04	T.			.10	.05			.17					.06						3.18
Big Spring	Colorado					T.	T.		.04	.03						.12	.32		.04	T.								T.			0.55
Blanco	Guadalupe	.18						1.57	.57		.09		.05								.05		.22			.14			.86			3.73
Boerne	San Antonio					.03	1.23	.80	.05		.03	.05	.01				T.			.05	.01	.04			.18				.25			2.73
Booth	Brazos							.24	1.10	.34	.20	.03					.58	2.10									.05			.02		4.66
Bowie	Trinity					.02				.31							.36		.65		.22					.03			.72			2.31
Brady	Colorado																															
Brazoria	Brazos	.02						1.25	1.13	1.26	.02			.05			.59			T.	.01					T.			.02	.01		4.36
Brazos	do	.62						.55					.22																.55			1.94
Brenham	do		.22					1.78	.38	.20	.05	T.	.05	T.			.03	.46				.93				.05	T.			.09		4.24
Bridgeport	Trinity	.07	T.					.27	T.	.15			.12				.30	.32		.10		.53					.20		.65			2.71
Brighton	Coast							1.00	2.00	.40							.15															3.55
Brownsville	Rio Grande							.08	.42	1.26	T.														T.							1.76
Brownwood	Colorado	.08						.44		T.							T.	T.	.07			.05					.10		.60			1.34
Cameron	Brazos						1.13	.04		.06	T.	.11								.03		.08				.01			.44			1.90
Carmona	Neches	.11	T.			T.	T.		1.45	.07	T.					T.	.35	.01			.34				T.	T.		1.11			3.44
Carrizo Springs	Nueces					T.		1.10	.10	.10	T.						.10			.10				T.							1.50
Claytonville	Brazos									.40							.20	.11	.10	.15									.93			1.89
Clifton	do	.10					.18	.59		.03		.03					T.			T.	T.					T.	.69		.41			2.03
Coleman	Colorado	.10				T.	T.	.12		.05		.05					.12		.10							T.			.33			0.87
Collegeport	Coast																															
College Station	Brazos	.10					T.	1.49	.10	.15	.03		.10				T.				.04	T.							.10			2.11
Colorado	Colorado																.31	.55											.25			1.11
Columbia	Brazos																															
Columbus	Colorado		.14					1.04	.74	.50	.04		T.	.02			1.60													.08		4.16
Corpus Christi	Coast	.01						.57	.61	.29	.01		.02	.01		T.	.04			T.	.01		T.		T.	T.	T.		T.			1.57
Corsicana	Trinity		.25					.90		.05	.25	T.	.09	T.			.27				.16	T.				T.	.10	.78	.15	.75		3.75
Cotulla	Nueces							2.10	1.40																							3.50
Crockett	Trinity						.35	1.31		.15			2.26			T.				.26	.04	T.				T.			.65			5.02
Cuero	Guadalupe							.24	.97	.71	.16	.02					.09	.11			.02					.07						2.39
Dallas	Trinity	.22	1.02					.84		.03	.22		.46				.12			.03							.04	T.	.58	.12		3.68
Danevang	Coast							1.00		1.60				.05			.40			.15												3.20
Decatur	Trinity						.40										.60															1.00
Del Rio	Rio Grande	.12					.02	.87	.08			.01				.01				T.	T.				.01		.05					1.17
Devine	Nueces	.20					T.	1.90	.10	.12	T.									.05					T.	.05		.05				2.47
Dialville	Neches	.83					.48	1.05		.55			.13	T.			.12			2.65	.02					T.	.07		.78			6.68
Dilley	Nueces							1.50	.75											.15												2.40
Dublin	Brazos	.19						1.23			.09						.09				.05	.01					.14		.78			2.58
Duval	Colorado	.12					.32	1.19		T.		.71								.13	T.	.56			T.	.03			.44			3.50
Eagle Pass	Rio Grande							T.	1.95	.15	.02						T.			T.												2.12
Eastland	Brazos	.10						.04			T.	T.	T.				.15	.12	T.	.20	.30	T.				T.			.33			1.24
Edna	Lavaca						.15	1.00								.16	.60					.20											2.11
El Paso	Rio Grande				T.	.04		.88	T.							T.	.04															0.96
Encinal	Nueces							2.20	1.05	.30										.10												3.65
Eola	Colorado																															
Fairland	do	.29					.14	1.47	.03	.05			T.	T.	T.		T.		.31	T.				T.	.07	T.			.94			3.30
Falfurrias	Coast	T.						.68	.51	.12		T.								T.					.13							1.44
Flatonia	Guadalupe	.05						.86	.17	.11	.02	.02	.04			.01	.54			T.	.01				T.	.01	T.		.05			1.89
Flint	Neches	.11					.39	1.19		.62	.01		.07							.52		.08			.01	.10		.88				3.98
Fort Clark	Rio Grande							*	1.80	T.																						1.80
Fort Davis	Pecos						T.	.42																								0.42
Fort McIntosh	Rio Grande							1.12	.30																							1.42
Fort Stockton	Pecos							.21	.06	.06						T.	.05															0.38
Fort Worth	Trinity	1.13					.84			.17	T.	.18				.13	.40		.01	T.	T.					T.	T.	T.	.34			3.20
Fredericksburg	Colorado	.17					T.	1.65	.05	.03		.02					T.			.07						T.			.35			2.34
Gainesville	Trinity	.16								.17			1.15				.45			.10	.20					.20			.87			3.30
Galveston	Coast	.04						1.38	.10	.98	T.		T.	.02		T.	1.76				T.								.01			4.29
Gatesville	Brazos	.10					.15	1.55				.15								.10		.50					.52		.62			3.69
Georgetown	do	.07	.04				T.	1.15	.07		.06		.02				.04				.29	.02	.43			.04		T.	.34	.11		2.68
Gonzales	Guadalupe	.20						.65	.39	.11	.04						.30													.06		1.75
Gorham	Brazos		.10				T.	.88			.24		.08							T.	T.					.65		.57				2.52
Graham	do					.12	.36			.13							.49		.01	.04						.10			.62			1.87
Grand Falls	Pecos							.10	.05								T.														.25	0.40
Grand Saline	Sabine	.98					.17	1.35		.39	T.	.55					.14		T.	.17		T.				T.	.86		.77			5.38
Grapevine	Trinity	2.15					1.47		.25		.46						.22		T.										.76			5.31
Greenville	Sabine	1.10	.50								.60		1.27				.01				T.	.01					T.		T.			3.49
Hallettsville	Lavaca	.10					T.	.64	.34	.45	.05	T.	T.			T.	.59			T.	T.	T.	T.		T.	T.			T.			2.17
Hamlin	Brazos																.37	.03		.17								.49				1.06
Harlingen	Coast							.15	1.14	1.64													.05									2.98
Harper	Colorado	.19					.15	1.05	.04				.08															.45					1.96
Haskell	Brazos	.30	.08														.06			.44									.53			1.41
Hebbronville	Coast							1.33	.30																							1.63
Hempstead	Brazos		.23						1.50	.49	T.	T.	T.	T.				T.	.50				.12				T.	T.			.44	3.28
Henderson	Neches	.12					.43	1.67		.44			.68	.03			.06				.06	T.					.06		.96			5.41
Hewitt	Brazos	.06					.16	.62		.29		T.					.12			.16	.90					T.	.33		1.42			4.06
Hico	do	1.24					1.65	.40		.28																.05	.03	.01	1.41			5.07
Hillsboro	do								.23			.30						.50										1.31	.82			3.16
Hondo	Nueces	.25						2.40		.15	T.										.11					.15			T.			3.06
Houston	Coast	.03					.01	1.26		.58	.01	T.	.01	T.		T.	4.70				T.	.01				T.			.01			6.62
Huntsville	Trinity							2.32	.35		T.							.47				.65				T.				.40		4.14
Jayton	Brazos																															
Jewett	Trinity		.15				1.00	.50												1.75	.05	T.								1.05		4.50

TABLE 2.—*Daily precipitation for April, 1912. District No. 8*—Continued.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total.
Texas—Continued.																																
Junction	Colorado							1.33																					.14			1.47
Kaufman	Trinity	.16					.10	1.26		.63			.23				.04									T.	1.11		.84			4.37
Kerrville ‖	Guadalupe	.26	.21					1.04	.72	.10	.04							.11								.08			.35			2.91
Killeen	Brazos	.06					.09	1.69		.04			.11							.39	.94	T.					.04		1.22			4.58
Knickerbocker	Colorado	.08			T.	T.		.79	T.	.06		T.					T.	.15							T.			.32			1.40
Kopperl ‖	Brazos	.35	.20					.65			.15		T.													.25		.80			2.40
Lagrange	Colorado	.06						1.82	.15	.23	.03	T.	.06					.28					.08		T.			.06			2.77
Lamesa	do						T.		.03				.02			.06		.24									12				0.47
Lampasas ‖	Brazos							1.18	.11	T.											.56				.02	.10		.65		.27	2.89
La Parra	Coast								1.60	.60	.10														12						2.42
Laureles Ranch	do							2.00	.60	.07																					2.67
Liberty ‖	Trinity	T.	T.					1.00	1.00	.26	.68	T.	T.				.29	3.52			.60					T.			.33		7.68
Llano ‖	Colorado	.08					T.	1.78	.30	.08	T.						T.				.15				.01	T.		.72			3.12
Llano Grande ‖	Rio Grande								.77		1.30																				2.07
Long Lake ‖	Trinity					1.10		.96		T.	.30	T.	T.								2.30								.60		5.26
Longview ‖	Sabine		.35					1.45			1.23		.80	.40				.08			.85	.05	.04					.20		1.12	6.57
Lubbock	Brazos	T.					.03	T.	T.	.05						T.	.40	.02													0.50
Lufkin	Neches					T.			.90	.06			2.76			.02	.16				.76					T.		.36			5.02
Luling ‖	Guadalupe	.06	.08					.70	.56	.10	.04	T.	.03	T.			.05								.02				.40		2.04
McGregor	Brazos						.90													.66						.60		.68			2.84
McKinney	Trinity	2.71					.06	.01		.27	T.	T.	1.32				.45		.04	.02	.56	.12			T.				.74			6.30
Marathon	Rio Grande				—			.46		.60																						1.06
Marble Falls ‖	Colorado	.16	T.				T.	1.20	.70	T.	T.										.06				.05	T.		1.00			3.17
Marfa	Rio Grande										.15		.25																		0.40
Marshall	Sabine	.21					.38	1.18		.12	.39		1.50				.36				1.03					.35		1.65			7.17
Matagorda	Coast								1.82	6.00							.39														8.21
Mexia ‖	Brazos	T.	.15					.53		T.	.32		.03				T.				1.40	.03				.03		.18	.40		3.07
Midland	Colorado								T.	T.		T.				.10	.08		.01								.10				0.29
Mission ‖	Rio Grande								1.70	.85	.10														.08						2.73
Mont Belvieu	Coast							1.06	.81	1.05	T.						2.26					.02				T.		.06	.29		5.55
Mountain View	Pecos																															
Mount Blanco	Brazos																.43	.47										.31			1.21
Nacogdoches ‖	Neches	.51					.78			.25		2.49	T.		T.	T.	.62			1.64	.84	.18						.15			7.46
New Braunfels	Guadalupe	.10						1.21												.14					T.	.06		T.			1.51
Palestine	Trinity	.16					.37	1.09		.22	T.	T.	.01	T.			T.			1.67	.18	T.				.06	.01		.66			4.43
Panter	Brazos	.60	.05		T.	.10	T.	.10				.05						T.	.05	.08		T.					T.	.51			1.54
Pearsall	Nueces	.20						.93	.14											.07					.14						1.48
Pierce	Colorado							1.17		.70							.58	.24													2.69
Plainview	Brazos	.78				T.	.10		.06							.04	.37	.03	T.						T.	T.					1.38
Port Arthur	Coast																														‡4.00
Port Lavaca	do	T.						1.33	.48	2.22		T.					.35								T.					T.	4.38
Post City	Brazos																															
Putnam	do	.55															.20			.20	1.00							.40			2.35
Raymondville ‖	Coast								2.55	1.06	.06	.06			T.																3.73
Ricardo	do																															
Riverside ‖	Trinity		T.					1.00	.85		T.		.25					.15				.20							.60		3.05
Rockland ‖	Neches								1.10		.20		.10					.50											1.90		3.80
Rockport	Coast									2.90							.20			T.					.06						3.16
Rossville	Nueces	.15						.93	.03	.23		.05					.05			.07					.02	.06		T.			1.60
Runge	San Antonio							1.10		.90																					2.00
Sabinal	Nueces							2.03	.02	.22							.06			.09						.09		.04			2.55
Salado	Brazos						.20	1.09												.10	.10	.88						1.00			3.37
San Angelo	Colorado							.90	.07							28												.24			1.49
San Antonio	San Antonio	.08					.02	1.35	.01	.03	.01	T.	T.							.04	.01				.08	.05			.10			1.78
San Augustine	Neches	.14	.04				T.	.68		.32			1.32	T.			.14				1.64	1.34	.14			.01	T.		.12			5.29
San Juanito	Coast							.81	.56	.21	.04									T.					.06					.30	1.98
San Marcos ‖	Guadalupe								1.26																			.10			1.36
San Saba	Colorado	.09					.04	2.20		.02							.02									.03	.31		.88			3.59
Santa Gertrudes ‖	Coast								1.78	.63																					2.41
Sealy	Brazos	.09						.96	.29	.17	.02	T.	.01	.02			1.56			T.	T.				T.	T.		T.			3.12
Seymour	do	.80					T.					T.					.43	T.		T.							.30				1.53
Snyder ‖	Colorado	.09								.06							.20	.04	.06									.27			0.72
Somerville	Brazos	T.						1.70		T.			.30				T.					T.	T.					T.			2.00
Sonora	Rio Grande						3.30																					.25			3.55
Spur ‖	Brazos	.58	.15				.01			T.		T.					.13	.06	T.	.01								.11			1.05
Stamford	do										.08						.41	1.01									.85				2.35
Stowell	Coast	.20						1.60		1.00					.10		3.72														6.62
Sugarland	Brazos							1.88	.37	.22		.01					1.76						T.			.08						4.32
Sutherland Spgs.	San Antonio							.93		.46																						1.39
Taylor	Brazos	.09					.23	.85		.63	T.	.01		T.						.01	.54	T.				.01			.64			2.41
Temple ‖	do	.11	.07				.03	1.10	.08	.05							.79				.49	.19					.13		.75			3.79
Theodore	Pecos						.03	.03	.02	.02								.07														0.17
Thurber	Brazos	.12					.06					.65					.23			.08									.41			1.55
Tivoli	Guadalupe							.63	2.00	.05										.25												2.93
Uvalde	Nueces	.18					.10	1.00		.11		T.					.21								.09							1.69
Valentine	Rio Grande					T.		.51	.10																							0.61
Valley Junction ‖	Brazos	.20						T.	1.70				.75															.80			3.45
Victoria ‖	Guadalupe							1.07	1.25							20																2.52
Waco ‖	Brazos							1.12				34	T.				.24				1.54		.22		T.	.64		1.28	T.		5.38
Waxahachie ‖	Trinity	.13	.07					.11		.12	.28		.20				T.				T.	.02				.38	.04	.84	.22		2.41
Weatherford	do	1.30	.10					.12		.06	.10		.38				.13	.24		T.					T.	.06		.44			2.93
Wills Point	Sabine	.40					.08	1.50		.60	.05		.28				.20				T.				T.	.79		.82			4.72
Winters	Colorado																.60	.07										.45			1.12

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations for April, 1912. District No. 8, Texas and Rio Grande Valley.*

Date.	Colorado.				New Mexico.														Texas							
	Garnett.		San Luis.		Agricultural College.		Carlsbad.		Fort Stanton.		Mountain-air.		Rosedale.		Roswell.		Santa Fe.		Santa Rosa.		Abilene.		Big Springs.		Browns-ville.		Corpus Christi.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	50	10	43	21	62	32	71	37	52	23	56	26	48	25	60	31	44	24	49	32	68	43	74	42	88	72	78	68
2	54	13	58	18	67	38	68	34	65	17	63	19	56	28	67	28	52	20	65	25	65	41	68	39	81	60	72	55
3	58	14	61	24	74	38	82	30	67	18	67	26	55	30	72	30	59	30	70	29	73	44	75	46	73	52	63	55
4	62	18	60	26	70	49	84	32	70	33	72	35	60	35	82	44	60	37	76	38	72	52	75	51	76	52	68	62
5	58	20	59	24	73	44	79	57	69	35	71	34	57	40	77	44	59	37	74	38	77	57	77	56	80	60	72	64
6	56	23	60	27	64	39	76	47	56	32	61	27	56	30	74	41	46	30	62	40	80	58	82	57	84	65	74	67
7	58	30	59	26	50	39	69	45	47	28	45	28	45	28	60	41	49	28	58	30	58	47	70	49	81	66	69	57
8	58	27	60	23	54	40	54	38	59	27	58	28	46	26	58	39	41	28	58	34	67	47	61	44	68	55	62	53
9	60	19	63	30	70	37	78	41	67	31	67	36	56	25	77	35	59	26	73	33	72	56	78	51	69	55	65	56
10	56	28	64	30	70	52	80	48	69	32	65	37	58	36	80	40	51	33	70	37	82	53	89	51	79	61	70	62
11	57	18	62	24	75	39	83	41	68	32	66	25	59	30	79	40	59	30	74	36	77	60	89	51	82	70	70	67
12	48	21	58	30	65	41	82	50	60	35	55	29	54	29	75	41	48	23	66	37	86	63	89	59	79	70	76	68
13	53	17	57	18	58	36	75	40	52	27	51	24	45	22	64	38	42	24	57	34	74	51	82	45	91	72	81	70
14	53	17	53	18	68	32	77	43	64	33	56	26	55	24	75	38	51	23	65	38	82	49	82	42	76	68	75	65
15	54	28	49	24	61	39	73	41	60	26	59	30	50	32	67	41	51	32	59	39	76	51	77	44	84	69	73	70
16	48	17	49	26	64	40	66	42	53	32	55	34	54	27	64	37	48	32	55	33	55	45	60	47	90	73	88	69
17	50	19	50	24	70	38	76	35	58	30	59	30	50	30	67	35	47	32	60	37	66	39	74	38	80	65	74	59
18	48	20	50	23	72	39	79	40	60	27	56	28	48	28	74	35	45	30	64	34	76	48	82	47	80	54	73	63
19	50	22	47	25	73	40	80	37	65	26	64	24	60	40	76	34	53	31	70	32	74	56	83	49	86	67	72	69
20	47	25	48	23	71	49	80	50	62	42	55	32	54	30	73	44	45	31	62	34	84	60	85	57	88	72	75	70
21	50	15	48	13	70	40	82	49	63	36	55	25	58	26	74	33	47	30	62	37	80	53	85	46	97	70	78	71
22	55	12	50	17	74	31	84	52	70	27	71	24	62	26	74	34	55	27	68	30	71	46	78	44	82	71	84	70
23	56	23	63	19	80	38	81	48	71	29	76	28	63	31	82	37	62	33	76	33	82	52	88	53	81	65	75	64
24	67	22	63	25	84	41	85	47	76	32	66	34	68	38	80	45	63	45	74	39	82	58	85	61	84	70	72	69
25	57	28	61	35	77	43	80	47	68	46	68	24	62	40	80	43	56	35	72	38	87	68	93	66	87	73	80	71
26	57	19	52	20	77	34	86	46	70	34	67	34	64	30	82	42	58	31	76	39	86	58	89	52	89	72	81	74
27	59	29	58	30	73	49	80	43	67	36	66	32	51	36	82	38	59	33	77	42	84	66	91	52	89	74	79	74
28	60	30	56	30	75	44	82	44	71	32	71	36	63	31	77	51	60	33	69	43	74	55	80	52	89	74	82	74
29	67	28	60	32	84	40	88	40	78	32	78	30	74	42	85	37	66	39	80	36	77	49	87	44	89	73	82	69
30	68	29	66	38	85	48	96	45	80	48	81	43	75	52	91	42	72	44	85	44	90	60	99	61	92	71	78	69
Mns..	55.8	21.4	56.2	24.1	70.3	40.3	78.5	43.0	64.6	31.3	63.3	29.6	56.9	31.6	74.3	38.6	53.6	31.0	67.5	35.7	75.9	52.8	80.9	49.9	83.1	66.4	74.7	65.8

Date.	Texas.																									
	Del Rio.		El Paso.		Fort McIntosh.		Fort Stockton.		Fort Worth.		Galveston.		Hallettsville.		Houston.		Lufkin.		Palestine.		Plainview.		San Antonio.		Seymour.		Taylor.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	82	52	61	38	89	67	85	45	65	45	68	65	77	66	72	61	78	61	71	50	52	36	80	58	63	45	72	52
2	74	48	67	36	85	47	71	36	64	43	65	55	67	50	64	51	63	44	60	44	65	35	71	50	67	40	65	46
3	73	37	74	46	82	45	77	37	70	43	62	55	72	42	69	47	75	37	72	46	70	35	71	42	74	43	71	40
4	73	52	76	59	83	57	83	53	72	49	66	60	74	48	71	50	76	42	71	47	75	41	73	49	79	66	72	48
5	76	57	73	55	83	57	78	52	76	57	69	62	80	56	76	60	76	53	75	55	72	43	76	55	74	50	78	56
6	82	65	65	44	91	71	81	46	73	58	72	64	77	65	77	63	72	62	66	64	67	48	73	63	83	63	71	64
7	71	48	57	36	88	55	75	42	58	47	68	53	65	52	69	50	71	64	65	52	59	35	67	48	67	47	66	52
8	55	48	52	38	62	46	52	40	64	44	62	53	62	52	63	51	71	54	66	49	53	41	60	50	69	44	62	49
9	69	52	71	43	71	45	80	47	60	54	65	62	65	55	67	57	68	49	58	52	75	43	68	54	73	63	62	54
10	69	56	71	51	78	55	89	52	69	57	71	64	78	62	77	64	79	56	75	56	82	43	74	58	83	53	75	60
11	79	65	76	44	87	61	88	48	78	61	70	66	78	65	77	66	81	63	78	65	80	41	76	65	78	62	75	64
12	87	68	68	44	86	69	87	52	81	60	74	67	76	69	76	69	80	62	78	62	80	53	77	67	88	68	80	67
13	83	59	59	41	87	60	83	46	77	58	76	66	79	69	84	69	84	66	79	66	73	38	82	65	80	50	80	64
14	85	54	70	40	92	62	81	45	83	52	74	64	86	55	85	60	87	55	84	60	74	40	88	57	83	50	87	59
15	79	64	63	44	86	67	88	43	88	62	74	69	80	70	79	71	86	68	80	68	70	41	80	66	72	53	83	65
16	78	58	66	44	86	64	73	46	67	51	70	65	77	67	73	60	80	67	76	54	55	44	77	68	68	50	72	56
17	79	50	70	47	86	59	80	38	65	44	72	59	72	54	73	55	72	49	66	45	62	39	76	50	66	42	70	48
18	82	54	72	45	98	54	85	43	66	47	67	60	78	51	72	52	82	45	71	44	71	38	80	51	72	53	77	46
19	83	61	74	50	92	62	83	43	74	54	72	66	74	60	75	60	79	55	75	54	74	38	70	62	72	52	69	58
20	93	67	72	51	96	67	88	42	79	60	73	68	82	68	77	69	76	61	70	60	75	46	85	68	87	68	82	57
21	93	66	71	48	99	68	88	46	81	64	76	69	87	71	86	71	79	62	79	68	74	38	90	69	84	53	85	63
22	88	56	75	44	97	68	81	44	71	50	79	71	81	66	82	67	80	67	76	58	71	35	81	61	71	44	75	56
23	83	53	81	44	90	55	87	55	82	50	74	65	82	54	80	59	82	50	80	52	80	38	82	57	85	49	82	51
24	70	63	84	59	87	70	80	58	82	59	74	68	83	59	78	60	84	53	81	53	78	43	74	56	85	57	82	57
25	88	67	79	55	99	70	95	60	80	66	76	70	82	59	80	70	80	62	77	66	83	58	85	66	90	74	82	66
26	90	68	80	50	100	68	91	48	86	72	76	73	86	73	81	73	84	72	81	70	85	45	85	71	85	51	84	69
27	89	70	76	48	99	68	92	55	81	66	79	73	85	73	85	72	85	72	83	73	77	46	85	72	85	63	84	73
28	93	64	76	47	98	69	87	52	81	59	78	73	85	69	83	74	81	71	76	64	78	38	89	59	77	56	82	57
29	91	55	85	47	98	62	94	42	73	53	83	71	84	60	81	66	78	52	72	56	75	35	90	57	77	51	79	56
30	94	65	86	56	99	62	98	57	85	55	76	68	86	58	81	60	85	58	83	53	91	45	87	59	94	63	86	59
Mns..	81.0	58.1	71.7	46.5	89.1	61.0	83.3	47.1	74.4	54.6	72.0	64.8	78.0	60.6	76.4	61.9	78.5	57.7	74.1	56.9	72.5	41.3	78.4	58.8	77.7	54.1	76.3	57.1

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 9, COLORADO VALLEY.

FREDERICK H. BRANDENBURG, District Editor.

GENERAL SUMMARY.

As regards low temperature and unsettled weather, April resembled the month immediately preceding, the improvement in conditions not keeping pace with the march of the season. Storms were frequent; in fact there were only 3 days in the month during which weather conditions were not in some degree dominated by low-pressure areas central in the district or close by. Sustained cold was general, and over the greater part of the southern half of the Colorado Basin the month was the coldest April of record. It is also true that the lowest temperature of the month in southern Utah and central Arizona was as low or within one degree as low as ever recorded in April. High winds were not uncommon in the southwest, and sand storms were frequent in western New Mexico and eastern Utah. There was high water in the Verde, Salt, and Gila Rivers lasting several days, following the unusually heavy snowfall of the 11th and 12th in northern Arizona. Inconvenience and interruption to traffic resulted from the difficulty in fording streams.

TEMPERATURE.

The mean of the 145 stations reporting was 46.8°, or 4.7° below the normal. The mean for April, 1911, was 52.5°. The highest monthly mean was 70.0° at Aztec, Ariz., and the lowest, 18.8°, at Corona, Colo. Days with temperatures above the normal were few and occurred between the 3d and 9th. From the 10th to the 23d, except for a day or two in Arizona, there was a decided deficiency of temperature. Some improvement occurred locally in the last week, but as a whole temperatures remained 5° or more below the normal. The highest temperatures occurred generally on the 24th and the last two days, while the lowest occurred principally on the 14th and 21st in Colorado, the 13th and 14th in New Mexico, and the 1st and 13th in Arizona. Zero temperature or lower occurred at one station each in the Wyoming and Utah areas, and at four stations in western Colorado.

Details of temperature are summarized in the following table:

Areas of States in district No. 9.	Temperature.					
	Mean.	Departure from normal.	Highest.	Station.	Lowest.	Station.
Western Wyoming.	33.3	−4.6	68	Green River	−2	Pinedale.
Western Colorado.	37.6	−4.3	79	Rangely	−7	Crested Butte.
Eastern Utah.	43.8	−3.3	88	Green River	−3	Strawberry Tunnel (east).
Western New Mexico.	45.8	−4.5	87	Cambray	9	Berger's Ranch.
Arizona.	55.5	−5.3	96	Maricopa	2	Williams.
Southeastern Nevada.	52.8	.....	84	Logan	20	Caliente.

PRECIPITATION.

The average for the 190 stations reporting was 0.94 inch, or 0.16 inch below the normal. The average for April, 1911, was 0.69 inch. The precipitation in the central and northern parts of the valley was local in character for the time of year, and as a whole there was a deficiency on the drainage of the Green, Grand, and San Juan Rivers. In the southern part of the district a moderate excess was general. There were only two days without precipitation in some part of the Colorado area; it was also persistent in Utah after the 9th, and from the 5th to the 18th in Arizona. The greatest monthly amount was 5.80 inches at Corona, Colo., while none occurred at 1 station in New Mexico and 3 stations in Arizona. Monthly snowfalls of 20 inches or more occurred at 1 station each in Wyoming, New Mexico, and Arizona, and 13 stations in Colorado. The maximum fall, 62 inches, occurred at Spruce Lodge, Grand County, Colo. The average number of days with 0.01 inch or more precipitation was 4 in western Wyoming; 9 in western Colorado; 5 in eastern Utah; 3 in western New Mexico; 3 in Arizona; and 5 in southeastern Nevada. For the district as a whole the average was 5 days.

The average precipitation and departures from the normal on the different watersheds are given in the following table:

Watershed.

Green.		Grand.		San Juan.		Little Colorado.		Gila.		Mimbres.		Colorado proper.	
Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.
0.85	−0.22	1.52	−0.22	1.15	−0.07	1.11	+0.54	0.66	+0.42	0.48	+0.38	0.85	+0.12

MISCELLANEOUS.

The amount of sunshine was generally somewhat below the normal. At Grand Junction it was 65 per cent of the possible; Durango, 70; Phoenix, 88; and Yuma, 92.

The relative humidity was less than the normal in the central and northern parts of the district, and above the normal in Arizona. The following are the values: Grand Junction, 52; Durango, 50; Phoenix, 47; and Yuma 42 per cent.

SNOWFALL IN THE MOUNTAINS OF COLORADO.

In the upper reaches of the streams rising on the slopes of the Continental Divide, or its spurs, the snowfall during April was less than the average. In this region practically the entire season's fall is still on the ground,

for, although temperature conditions have been favorable to settling, there has been practically no melting. For the time of year the depth of snow is much greater than usual on all watersheds, except the San Juan. At the end of April the average depth on the Yampa watershed, average altitude 7,700 feet, was 20 inches; for the Grand, average altitude 8,400 feet, 27 inches; for the Gunnison, average altitude, 8,900 feet, 27 inches; and for the San Juan, average altitude, 7,900 feet, 6 inches.

RIVERS.

The volume discharged by the Green was about the average for April, but that of the Grand and San Juan and the other tributaries of the Colorado was not only below the average but also the least in five years. A similar condition obtained in the lower reaches of the trunk stream notwithstanding a marked rise about the middle of the month caused by heavy local precipitation.

TABLE 1.—*Climatological data for April, 1912. District No. 9, Colorado Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Wyoming.																				
Battle Mountain	Carbon	7,300	....	38.8[h]	.....	61[h]	8†	20[h]	23	37[h]	0.54	.....	0.25	.....	5	3[h]	15[h]	4[h]	sw.	U. S. Forest Service.
Bigpiney	Uinta	.....	....	35.0[g]	.....	67[g]	22	12[g]	25†	51[g]	0.90	.....	0.30	0	5	4[g]	9[g]	10[g]	w.	Ira Dodge.
Daniel	....do	6,740	13	28.1	− 4.6	51	29	3	3	40	0.20	− 0.59	0.20	.....	1	9	21	0	nw.	J. M. VanDervort.
Eden	Sweetwater	6,577	3	35.1	.....	63	9	10	22	46	0.44	.....	0.14	3.5	7	11	13	6	w.	Eden Valley Land & Ir. Co.
Green River	....do	6,083	7	37.6	.....	68[e]	8	6	1	55[a]	0.40	.....	0.13	.....	6	16	10	4	w.	Geo. H. Maxom.
Pinedale	Fremont	7,167	6	28.6[e]	.....	53[e]	29	− 2[e]	1	40[e]	0.08	.....	0.08	1.0	1	13[b]	8[b]	7[b]	nw.	U. S. Forest Service.
Rambler	Carbon	9,232	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Willow Creek Cabin	Fremont	7,500	3	30.1[g]	.....	53[g]	25	1[g]	6	41[g]	.....	.....	.....	25.0	....	10[g]	3[g]	11[g]	nw.	Do.
Colorado.																				
Ashcroft	Pitkin	9,483	10	27.8	− 5.9	54	30	− 1	21	41	0.80	− 1.32	0.17	15.5	13	.....	.....	.....	.....	Dan McArthur.
Breckenridge	Summit	9,536	23	28.2	− 2.1	52	29	2	7	47	0.73	− 2.17	0.22	10.5	5	4	19	7	nw.	Mrs. J. G. Thompson.
Buford	Rio Blanca	.....	1	.....	.....	.....	.....	.....	.....	.....	2.15	.....	0.58	13.0	9	16	8	6	w.	Mrs. H. Genler.
Cascade	San Juan	8,900	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	San Juan W. & P. Co.
Cedaredge	Delta	6,175	14	43.0	− 4.8	65	8†	21	22	35	0.85	+ 0.13	0.27	3.0	7	10	16	4	.....	Harry A. Cobbett.
Chromo	Archuleta	7,500	6	36.0	.....	73	30	4	21	66	1.10	.....	0.30	.....	6	15	1	14	sw.	Lawrence Nolan.
Cochetopa	Saguache	9,088	3	.....	.....	.....	.....	.....	.....	.....	0.15	.....	0.05	2.8	4	7	12	11	w.	Bessie McDonough.
Collbran	Mesa	6,000	19	41.0	− 5.6	65	24†	18	14†	35	2.41	+ 0.94	0.78	12.0	15	12	10	8	sw.	A. A. Wood.
Columbine	Routt	8,766	2	.....	.....	.....	.....	.....	.....	.....	2.26	.....	0.40	37.0	12	9	15	6	sw.	Mrs. M. A. Caron.
Columbine Ranch	Delta	6,925	2	.....	.....	.....	.....	.....	.....	.....	2.45	.....	0.70	21.0	7	14	6	10	s.	George W. Wade.
Corona	Grand	11,660	5	18.8	.....	40	7	3	13	30	5.80	.....	0.84	45.0	12	.....	.....	.....	w.	U. S. Weather Bureau.
Craig	Moffat	.....	2	41.3[f]	.....	68[f]	29	20[g]	23	38[f]	0.91	.....	0.50	.....	3	14[b]	7[b]	1[b]	.....	Joseph F. Haubrich.
Crawford (near)	Montrose	6,600	2	38.8	.....	62	30	20	14†	30	0.99	.....	0.20	6.0	10	17	5	8	.....	C. W. Roe.
Crested Butte	Gunnison	8,867	2	26.4	.....	52	24	− 7	21	43	1.76	.....	0.70	17.5	7	10	10	10	.....	Charles L. Ross.
De Beque	Mesa	4,935	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. M. Quigley.
Delta	Delta	4,965	22	44.8	− 6.1	73	30	21	14†	47	0.78	+ 0.26	0.35	T.	6	18	11	1	nw.	E. M. Getts.
Dillon	Summit	8,800	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harry T. Hamilton.
Durango	La Plata	6,534	17	41.4	− 5.0	68	30	21	1	35	1.58	+ 0.44	0.39	4.9	10	6	17	7	nw.	U. S. Weather Bureau.
Eureka	San Juan	10,000	5	.....	.....	.....	.....	.....	.....	.....	1.83	.....	0.27	19.0	11	11	0	19	s.	San Juan W. & P. Co.
Fraser	Grand	8,560	3	26.0	.....	53	24	0	7†	49	1.97	.....	0.45	20.5	14	5	3	22	w.	L. D. C. Gaskill.
Fruita	Mesa	4,510	13	46.5	− 4.7	72	30	21	14	44	0.83	+ 0.11	0.32	T.	6	11	15	4	nw.	J. B. Willsea.
Glade Park	....do	7,000	1	.....	.....	.....	.....	.....	.....	.....	1.19	.....	0.45	13.0	7	9	16	5	sw.	A. F. Terrill.
Gladstone	San Juan	10,400	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	San Juan W. & P. Co.
Glenwood Springs(n'r)	Garfield	5,823	14	41.6	− 5.5	66	24†	19	21	40	0.84	− 0.35	0.20	0	5	19	5	6	w.	E. A. O'Neil.
Grand Junction	Mesa	4,608	21	48.1	− 5.1	73	24	27	14	35	0.36	− 0.40	0.19	0.4	7	8	14	8	se.	U. S. Weather Bureau.
Grandlake	Grand	8,153	4	.....	.....	.....	.....	.....	.....	.....	1.51	.....	0.85	20.0	5	14	13	3	w.	Mrs. Belle Kauffman.
Grand Valley	Garfield	5,089	20	45.6	− 3.5	73	9	23	14†	46	1.11	− 0.04	0.44	T.	11	.....	.....	.....	.....	David Evans.
Gunnison	Gunnison	7,670	19	35.2[d]	− 4.4	61[d]	29†	10[d]	21	43[d]	0.23	− 0.55	0.07	T.	9	12[d]	14[d]	0[d]	sw.	Clarence Adams.
Hesperus (near)	La Plata	7,610	....	.....	.....	.....	.....	.....	.....	.....	0.90	.....	0.24	15.2	7	7	8	15	.....	G. F. Snyder.
Horsefly	Montrose	8,700	2	.....	.....	.....	.....	.....	.....	.....	3.97	.....	1.08	54.0	10	13	6	11	sw.	Lawrence J. Finch.
Ironton	Ouray	10,000	2	.....	.....	.....	.....	.....	.....	.....	2.08	.....	0.73	19.2	5	5	8	17	se.	Mrs. Amanda E. Foley.
Ladore	Moffat	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Geo. C. Bassett.
Lake City	Hinsdale	8,686	7	33.4	.....	60	30	10	14	41	0.84	.....	0.25	10.3	8	9	7	14	s.	J. F. Maurer.
Lay	Moffat	6,190	18	39.2	− 2.8	67	7	18	22	41	1.10	− 0.03	0.63	6.0	6	7	8	15	sw.	A. G. Wallihan.
Mancos	Montezuma	6,960	13	40.2	− 4.3	66	29	15	20	38	1.78	− 0.13	0.58	13.8	11	10	17	3	sw.	B. M. Krumpanitzky.
Marble	Gunnison	7,951	3	34.0	.....	57	9	5	21	44	2.97	.....	0.68	31.7	10	18	5	7	ne.	F. E. Morse.
Marshall Pass	Saguache	10,846	9	.....	.....	.....	.....	.....	.....	.....	1.33	.....	0.35	16.0	6	13	0	17	.....	Wm. L. Williams.
Meeker (near)	Rio Blanca	6,182	20	40.1	− 3.7	64	8†	18	14	41	1.15	− 0.36	0.58	6.0	6	10	14	6	sw.	T. Baker.
Montrose	Montrose	5,811	23	45.8	− 1.6	71	30	21	22	39	0.53	− 0.43	0.14	2.1	10	16	10	4	.....	U. S. Reclamation Service.
Nast	Pitkin	7,953	2	29.9	.....	54	24	1	21	49	0.69	.....	0.16	12.6	7	15	7	8	w.	Arthur Hanthorn.
Pagoda	Routt	6,500	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. J. W. Scott.
Pagosa Springs	Archuleta	7,108	5	38.4	.....	66	30	14	14	43	1.87	.....	0.32	14.6	11	11	12	7	sw.	E. T. Walker.
Palisades	Mesa	4,729	1	49.2	.....	75	30	29	14	36	0.75	.....	0.75	3.0	1	19	11	0	sw.	Elmer Hiatt.
Paonia	Delta	5,694	17	45.0	− 4.4	71	30	22	21	35	1.40	+ 0.46	0.35	3.0	7	8	13	9	sw.	J. M. Underwood.
Parshall	Grand	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. A. Field.
Pitkin	Gunnison	9,500	3	.....	.....	.....	.....	.....	.....	.....	0.91	.....	0.28	5.5	6	14	7	9	.....	Mrs. Maggie Cammann.
Pyramid	Rio Blanca	.....	1	32.4	.....	60	1†	8	25	40	1.40	.....	0.40	10.0	4	17	9	4	w.	E. E. Egry.
Rangely	....do	5,050	13	43.5	− 3.4	79	24	16	14†	49	0.60	+ 0.05	0.40	6.0	2	15	2	13	w.	J. H. McGuire.
Redcliff	Eagle	8,695	19	.....	.....	.....	.....	.....	.....	.....	2.02	+ 0.13	0.38	23.5	10	11	10	9	.....	Dorothea Greiner.
Rico	Dolores	8,824	10	.....	.....	.....	.....	.....	.....	.....	1.15	− 0.04	0.21	12.5	9	14	7	9	s.	Clinton B. Smith.
Rifle	Garfield	5,437	....	44.4	.....	70	24†	21	22	41	0.63	.....	0.24	0	11	9	12	9	nw.	Herman Eiche.
River Portal	Montrose	6,570	6	42.2	.....	65	24†	20	21	39	1.01	.....	0.31	4.3	8	10	2	18	.....	U. S. Reclamation Service.
Sapinero (near)	Gunnison	8,125	9	32.7	.....	55	24	8	21	36	2.12	.....	0.63	19.8	17	14	7	9	w.	W. F. Irving.
Shoshone	Garfield	6,110	2	44.2	.....	68	9	24	21	36	1.93	.....	0.45	13.0	14	11	6	13	.....	Central Colo. Power Co.
Silverton (near)	San Juan	9,400	5	20.8	.....	50	23	− 4	22	47	1.90	.....	0.39	20.0	9	19	0	11	sw.	San Juan W. & Power Co.
Spruce Lodge	Grand	9,600	4	.....	.....	.....	.....	.....	.....	.....	3.48	.....	0.62	62.0	16	9	15	6	n.	H. J. Wills.
Steamboat Springs	Routt	6,683	9	35.4	.....	66	25	7	1	54	1.76	.....	0.50	11.5	11	19	2	9	.....	M. Elliott Houston.
Tacoma	La Plata	7,300	5	.....	.....	.....	.....	.....	.....	.....	1.22	.....	0.30	8.2	11	5	11	14	s.	San Juan W. & P. Co.
Telluride	San Miguel	8,756	....	31.9	.....	59	24	5	21†	41	2.48	.....	0.53	35.9	14	13	4	13	w.	Wm. T. March.
Terminal Dam	La Plata	8,300	5	.....	.....	.....	.....	.....	.....	.....	1.81	.....	0.40	23.5	10	16	1	13	s.	San Juan W. & P. Co.
Uncompahgre Plateau	Montrose	8,400	2	.....	.....	.....	.....	.....	.....	.....	3.54	.....	0.98	35.0	7	7	21	2	sw.	Martin Esser.
Yampa (near)	Routt	8,000	3	.....	.....	.....	.....	.....	.....	.....	0.98	.....	0.30	1.9	9	7	13	10	n.	Percy A. Hughes.
Utah.																				
Aneth	San Juan	4,800	8	53.0	.....	76	30	28	14	33	0.28	.....	0.16	.....	4	19	6	5	w.	H. R. Antes.
Bluff	....do	.....	....	54.8	.....	78	29†	33	1	31	0.25	.....	0.19	.....	4	18	11	1	.....	Mrs. H. P. Raplee.
Castle Dale	Emery	5,500	13	44.7	− 1.5	68	29	23	23	37	0.30	− 0.36	0.20	.....	2	23	6	1	.....	James Jeffs.
Cisco	Grand	4,447	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Anderson.
Desert Lake	Emery	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. G. Mills.
Dragon	Uinta	.....	1	41.2	.....	66	8	20	21	41	1.06	.....	0.46	7.0	7	15	1	14	s.	Gilson Asphalt Co.
Duchesne	Wasatch	.....	5	41.5	.....	66	8†	21	18†	39	0.56	.....	0.18	1.3	7	10	12	8	.....	M. M. Smith.
Elkhorn	Uinta	6,657	....	.....	.....	.....	.....	.....	.....	.....	0.44	.....	0.30	4.0	4	9	18	3	ne.	Forest Supervisor.
Emery	Emery	6,200	11	39.0	− 6.1	67	24	14	1	47	0.10	− 0.21	0.10	1.0	1	10	2	18	n.	H. C. Wickman.
Escalante	Garfield	5,700	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. H. Barney.
Fort Duchesne	Unita	5,700	24	44.4	− 3.8	71	9	20	14	45	0.46	− 0.08	0.15	.....	8	14	11	5	w.	Geo. W. Dickson.
Fruitland	Wasatch	7,625	1	35.2	.....	60	8†	13	20	37	0.84	.....	0.32	9.0	8	11	13	6	sw.	J. Peter Nabb.
Green River	Emery	4,080	12	50.1	− 4.2	88	24	24	14	56	0.24	− 0.36	0.10	.....	6	8	21	1	sw.	Edgar E. Adams.
Hanksville	Wayne	4,200	1	48.2	.....	78	10	22	23	50	0.03	.....	0.02	.....	2	13	16	1	sw.	F. J. Weber.
Hite	Garfield	3,000	12	55.2	− 4.1	79	24†	35	14	34	0.44	+ 0.06	0.23	T.	6	15	14	1	.....	John P. Hite.
Hurricane	Washington	.....	....	.....	.....	.....	.....	.....	.....	.....	0.80	.....	0.35	.....	3	9	12	9	.....	Amos Workman.
Kanab	Kane	4,925	4	46.9	.....	73	30	21	20	34	1.39	.....	0.48	.....	5	.....	.....	.....	.....	V. A. F. Association.
La Sal	San Juan	7,000	9	39.8[e]	.....	61	30	19	14	32	0.79	.....	0.38	.....	4	4	14	12	.....	Gertrude W. Carpenter.
Loa	Wayne	7,000	18	43.8	+ 3.3	63	8†	7	11	46	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. S. McClellan.
Manila	Uinta	6,225	....	40.1	.....	68	9†	18	22	45	0.39	.....	0.20	4.5	4	13	10	7	w.	Daniel M. Nelson.

TABLE 1.—*Climatological data for April, 1912. District No. 9*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Utah—Continued.																				
Moab	Grand	4,000	22	52.0	− 3.4	77	30	26	23	43	0.65	+ 0.14	0.26	T.	8	16	5	9	.....	Henry Crouse.
Monticello	San Juan	7,545	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. F. Barton.
New Harmony	Washington	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. F. Price.
Orderville	Kane	6,660	.....	.....	.....	.....	.....	.....	.....	.....	2.04	.....	1.03	.....	6	.....	.....	.....	.....	F. A. Porter.
Pine Valley	Washington	6,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mason Gardner.
Price	Carbon	5,557	1	44.8	.....	68	8†	21	23	39	1.19	.....	0.67	.....	6	17	2	11	se.	R. H. Thompson.
Ranch	Kane	6,700	9	37.0	.....	62	28†	5	13	40	3.10	.....	0.85	.....	5	21	2	7	w.	J. W. Seaman.
San Rafael	Emery	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Foy.
St. George	Washington	2,880	25	54.0	− 3.4	82	7	28	20	46	0.48	+ 0.12	0.16	.....	4	8	15	7	.....	A. B. Ballantyne.
Scofield	Carbon	7,625	2	31.8	.....	56	8	4	14†	39	0.77	.....	0.45	9.8	10	17	3	10	s.	B. Newren.
Springdale	Washington	3,500	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hattie Wood.
Strawberry Tunnel (E.)	Utah	.....	.....	27.3	.....	49	9	− 3	14†	42	1.38	.....	0.58	14.0	6	12	11	7	.....	U. S. Rec. Service.
Sunnyside	Carbon	5,280	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Rader.
Teasdale	Wayne	7,000	2	36.9	.....	59	24	19	14	33	0.29	.....	0.10	.....	4	10	15	5	w.	Henry Cullum.
Thompsons	Grand	5,150	1	46.4	.....	70	30	24	13	33	1.14	.....	0.41	3.0	6	15	10	5	ne.	A. M. Starmont.
Tropic	Garfield	7,000	15	40.8[d]	− 4.2	66	30	18	20	35	1.20	+ 0.32	0.70	.....	3	5[d]	9[d]	12[d]	nw.	E. P. Bolton.
Trout Creek Ranger	Uinta	9,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Forest Supervisor.
Vernal	....do	5,050	15	43.4	− 5.2	72	8	21	18	47	0.69	− 0.02	0.25	0.5	7	19	9	2	.....	S. P. Trim.
White Rocks	....do	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.72	.....	0.30	4.5	8	9	13	8	.....	C. F. Keil.
Woodside	Emery	4,645	1	46.0	.....	71	30	20	23	44	0.39	.....	0.15	.....	3	13	11	6	s.	D. P. Adams.
New Mexico.																				
Alma	Socorro	5,500	15	48.6	− 5.3	82	29†	21	14	51	0.48	− 0.07	0.30	T.	3	5	23	2	s.	Max A. Balke.
Aragon	....do	5,856	5	42.7	.....	75	30	14	13	44	0.90	.....	0.60	2.0	4	15	11	4	sw.	John R. Milligan.
Aztec	San Juan	5,590	12	.....	.....	.....	.....	.....	.....	.....	0.25	− 0.17	0.17	T.	3	7	23	0	sw.	Dr. T. J. West.
Bergers Ranch	McKinley	8,000	.....	38.2	.....	65	29†	9	14	38	1.82	.....	0.71	12.0	7	10	12	8	w.	Herman Berger.
Black Rock	....do	6,500	3	38.4	.....	73	29	15	6	42	0.21	.....	0.12	.....	3	11	11	8	w.	D. Blackwater.
Bloomfield	San Juan	5,500	17	45.9	− 4.0	77	24	20	2	45	0.57	− 0.22	0.20	3.0	6	5	25	0	sw.	Fred Le Clerc.
Cambray	Luna	4,215	13	.....	.....	87	28	.....	.....	.....	0.96	+ 0.65	0.53	0	3	11	15	4	w.	Agt. So. Pac. R. R.
Cliff	Grant	4,470	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Belden.
Columbus	Luna	4,054	3	.....	.....	85	30	.....	.....	.....	0.86	.....	0.47	0	3	22	2	6	nw.	Agt. E. P. & S. W. R. R.
Deming	....do	4,333	35	56.1	.....	82	25	26	1	46	0.68	+ 0.49	0.68	0	1	28	1	1	w.	Agt. So. Pac. R. R.
Dulce	Rio Arriba	6,756	15	39.2	− 3.8	67	30	17	22†	44	0.38	− 0.46	0.20	2.0	2	.....	.....	.....	sw.	F. E. James.
Fort Bayard	Grant	6,152	37	48.2	− 5.0	75	30	24	1	37	0.15	− 0.21	0.11	T.	2	25	3	2	w.	U. S. General Hospital.
Fruitland	San Juan	4,800	18	49.4	− 2.0	77	30	23	14†	43	0.52	+ 0.08	0.36	0.4	4	19	11	0	sw.	C. J. Collyer.
Gage	Luna	4,486	12	49.4	.....	82	30	28	3†	44	0.90	+ 0.57	0.90	0	1	20	8	2	w.	Agt. So. Pac. R. R.
Gila Planting Station	Grant	6,475	1	46.3	.....	74	29†	22	1	41	0.22	.....	0.12	T.	3	20	8	2	sw.	U. S. Forest Service.
Hachita	....do	4,504	3	.....	.....	84	23†	.....	.....	.....	0.09	.....	0.62	0	2	25	1	4	sw.	Agt. E. P. & S. W. R. R.
Haynes	Rio Arriba	6,600	1	43.2	.....	75	30	19	19	45	0.86	.....	0.28	1.9	6	20	5	5	nw.	Dr. John R. Haynes.
Hermanes	Luna	4,451	3	.....	.....	.....	.....	.....	.....	.....	0.37	.....	0.37	0	1	18	4	8	w.	Agt. E. P. & S. W. R. R.
Lordsburg	Grant	4,245	29	54.2	− 6.6	86	29	23	13	53	0.07	− 0.10	0.07	0	1	5	20	5	sw.	Agt. So. Pac. R. R.
Luna	Socorro	7,300	7	40.6	.....	72	30	10	13	50	0.25	.....	0.20	T.	2	7	23	0	w.	C. B. Martin.
Mimbres	Grant	5,007	7	.....	.....	.....	.....	20	13	.....	0.20	.....	0.14	0	2	17	12	1	w.	C. Dennis.
Pinos Altos (near)	....do	7,253	1	.....	.....	.....	.....	16	1	.....	0.60	.....	0.40	4.0	4	15	13	2	nw.	O. L. Scott.
Pratt	....do	4,415	3	.....	.....	.....	.....	.....	.....	.....	0.04	.....	0.04	0	1	23	6	1	w.	Agt. E. P. & S. W. R. R.
Redrock	....do	4,150	7	.....	.....	.....	.....	.....	.....	.....	T.	.....	T.	0	0	24	4	2	.....	Robt. H. Wood.
Rodeo	....do	4,118	3	.....	.....	.....	.....	28	14	.....	0	.....	0	0	0	18	10	2	.....	Agt. E. P. & S. W. R. R.
Silver City	....do	5,860	1	46.7	.....	78	23	25	1†	46	0.27	.....	0.10	1.0	3	19	7	4	w.	E. M. Brumback.
Arizona.																				
Allaires Ranch	Cochise	4,184	16	.....	.....	.....	.....	.....	.....	.....	0.14	− 0.10	0.07	0	3	20	6	4	w.	Thos. Allaire.
Alpine	Apache	8,500	1	36.9	.....	69[a]	30	13[a]	22	44[a]	1.48	.....	1.02	3.0	4	15	7	8	w.	U. S. Forest Service.
Aztec	Yuma	492	13	70.0	− 2.1	92	29	41	12	28	0.65	+ 0.43	0.38	0	2	24	0	6	w.	Agent, Southern Pacific Co.
Benson	Cochise	3,523	31	55.2	− 9.2	86	22	28	13	53	0.32	+ 0.18	0.32	0	1	22	2	6	w.	Do.
Bisbee	....do	5,500	21	52.0	− 7.1	77	29†	28	13	32	0.59	+ 0.13	0.48	0	2	22	4	4	w.	Rev. J. G. Pritchard.
Bowie	....do	3,756	36	57.6	− 3.7	88	30	30	12	51	0.00	− 0.19	0.00	0	0	18	11	1	se.	Agent, Southern Pacific Co.
Buckeye	Maricopa	980	20	62.2	− 3.7	90	29†	35	1†	46	0.68	+ 0.43	0.60	0	2	27	3	0	sw.	H. E. Kell.
Canille	Santa Cruz	5,225	3	.....	.....	.....	.....	.....	.....	.....	0.40	.....	0.21	T.	2	13	15	2	sw.	R. A. Rodgers.
Casa Grande	Pinal	1,396	30	64.8	− 5.1	93	30	38	3	50	1.25	+ 1.10	1.25	0	1	27	0	3	.....	Agent, Southern Pacific Co.
Casa Grande Ruins	....do	1,422	4	62.0	.....	90	29†	36	1	45	1.12	.....	0.95	0	2	19	7	4	w.	F. Pinkley.
Cavecreek	Maricopa	1,520	5	58.6	.....	86	30	33	21	45	0.64	.....	0.60	0	2	14	15	1	.....	E. A. Howard.
Chin Lee	Apache	6,090	4	46.0	.....	76	30	25	2†	40	0.65	.....	0.47	0.5	5	1	11	18	sw.	F. L. Ostermann, O. F. M.
Chlarsons Mill	Graham	8,000	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Chlarson.
Clifton	Greenlee	3,584	21	61.6	.....	89	30	34	13	41	0.24	− 0.20	0.14	0	3	22	4	4	.....	P. Reisinger.
Cline	Gila	2,300	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. M. Clanton.
Cochise	Cochise	4,219	13	53.0	− 8.5	87	9	29	3	51	.....	.....	.....	0	.....	.....	.....	.....	.....	Agent, Southern Pacific Co.
Columbia	Yavapai	1,900	10	58.6	− 6.4	87	29	32	21†	38	1.21	+ 0.58	0.59	0	4	17	6	7	s.	M. J. Nolan.
Courtland	Cochise	4,543	3	.....	.....	.....	.....	.....	.....	.....	0.06	.....	0.06	0	1	7	20	3	w.	Agent, E. P. & S. W. Co
Dos Cabezos	....do	5,250	4	49.7	.....	83	30	20	13	47	0.47	.....	0.47	2.0	1	21	6	3	sw.	N. Erickson.
Douglas	....do	3,930	9	57.0	.....	91	30	29	1†	55	0.09	.....	0.05	0	3	24	4	2	sw.	Dr. F. T. Wright.
Dudleyville	Pinal	2,204	21	56.0	− 6.9	87	29	32	1	39	0.65	+ 0.15	0.28	0	5	13	12	5	sw.	G. F. Cook.
Fairbank	Cochise	3,862	3	.....	.....	.....	.....	.....	.....	.....	0.09	.....	0.09	0	1	24	5	1	sw.	Agent, E. P. & S. W. Co.
Flagstaff	Coconino	6,907	20	38.0	− 4.0	65	30	13	14	37	1.98	+ 0.35	0.41	21.5	7	15	12	3	w.	U. S. Weather Bureau.
Flagstaff (1)	....do	7,452	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. C. Moers.
Flagstaff (2)	....do	7,500	2	34.6	.....	64	30	4	1	44	0.82	.....	0.23	2.0	5	10	14	6	sw.	U. S. Forest Service.
Florence	Pinal	1,504	13	63.4	− 4.1	92	30	35	13†	42	1.10	+ 0.73	1.10	0	1	27	0	3	w.	Agt. Ariz. Eastern R. R.
Fort Apache	Navajo	5,200	40	47.0	− 5.0	77	29	23	1	48	1.08	+ 0.32	0.36	.....	6	24	4	2	sw.	Post Surgeon, U. S. A.
Fort Huachuca	Cochise	5,100	26	54.8	− 5.0	84	29	25	13	48	1.00	+ 0.73	0.60	.....	2	27	0	3	nw.	Do.
Fort Mohave	Mohave	604	44	62.6	− 8.2	90	8†	30	1†	54	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. F. Duclos.
Gilabend	Maricopa	737	22	67.1	− 3.5	90	30	40	11	35	0.00	− 0.14	0.00	0	0	23	0	7	ne.	Agent, Southern Pacific Co.
Globe	Gila	3,525	11	54.8	.....	81	29†	30	13	38	1.03	+ 0.50	0.59	1.0	6	9	21	0	nw.	B. G. Fox, M. D.
Grand Canyon	Coconino	6,866	7	39.8	.....	60	18	18	24	37	1.30	.....	0.60	13.0	4	10	20	0	sw.	Agent, G. C. R. R. Co.
Grand Canyon (1)	....do	3,676	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. C. Spaulding.
Granite Reef Dam	Maricopa	1,372	19	62.9	− 4.9	89	29	38	1†	38	0.98	+ 0.60	0.72	0	4	23	2	5	w.	U. S. Reclamation Service.
Hereford	Cochise	4,180	3	.....	.....	.....	.....	.....	.....	.....	0.18	.....	0.10	0	2	21	2	7	sw.	Agent, E. P. & S. W. Co.
Holbrook	Navajo	5,069	22	.....	.....	79	30	.....	.....	.....	1.44	+ 0.90	0.90	6.0	4	25	2	3	sw.	T. Larson.
Indian Oasis	Pima	3,000	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Menager.
Intake	Gila	2,230	5	.....	.....	.....	.....	.....	.....	.....	0.95	.....	0.95	0	1	25	4	1	w.	U. S. Reclamation Service.
Jerome	Yavapai	4,743	15	51.9	− 6.8	78	30	27	13	29	2.37	+ 1.41	0.77	0	7	15	11	4	n.	Dr. L. A. Hawkins.
Keams Canyon	Navajo	6,600	7	44.1	.....	71	30	21	14	36	0.85	.....	0.35	4.0	6	12	15	3	sw.	D. E. Livesay.
Kingman	Mohave	3,326	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. L. Yule.
Lakeside	Navajo	6,500	14	41.0	.....	70	29†	20	14	42	1.85	+ 0.92	0.90	11.0	5	15	0	15	sw.	Prof. J. Peterson.
Lewis Springs	Cochise	4,029	3	.....	.....	.....	.....	.....	.....	.....	0.03	.....	0.03	0	1	20	4	6	s.	Agent, E. P. & S. W. Co.

TABLE 1.—*Climatological data for April, 1912. District No. 9*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	
Arizona—Continued.																				
Maricopa	Pinal	1,186	35	62.4	− 8.5	96	29	30	1	46	0.51	+ 0.33	0.33	0	2	20	8	2	w.	Agent, Southern Pacific Co.
McNeal	Cochise	4,490	2	.....	.....	.....	.....	.....	.....	.....	0.18	.....	0.16	0	2	18	10	2	sw.	C. E. Bolton.
Mesa	Maricopa	1,244	17	60.2	− 6.4	87	30	37	1	42	0.60	+ 0.22	0.40	0	2	14	13	3	sw.	C. L. Diehl.
Mohawk Summit	Yuma	538	10	.....	.....	.....	.....	.....	.....	.....	0.00	− 0.07	0.00	0	0	25	1	4	e.	Agt. So. Pac. Co.
Naco	Cochise	4,579	3	.....	.....	.....	.....	.....	.....	.....	0.09	.....	0.09	0	1	20	7	3	sw.	Agt. E. P. & SW. Co.
Natural Bridge	Gila	4,990	23	.....	.....	.....	.....	.....	.....	.....	1.95	+ 1.00	1.10	10.0	4	12	15	3	sw.	D. G. Goodfellow.
Oracle	Pinal	4,500	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Winters.
Osborn	Cochise	4,676	3	.....	.....	.....	.....	.....	.....	.....	0.08	.....	0.05	0	2	18	9	3	w.	Agt. E. P. & SW. Co.
Paradise	....do	5,436	6	48.8	.....	81	29†	16	13	49	0.87	.....	0.62	1.0	2	14	10	6	sw.	J. C. Hancock.
Parker	Yuma	345	18	67.6	− 2.3	92	30	38	1	44	0.50	+ 0.40	0.50	0	1	25	3	2	.....	M. A. Israel, M. D.
Payson	Gila	5,550	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. McDonald.
Phoenix	Maricopa	1,108	17	63.1	− 3.5	88	29	38	1	39	0.52	+ 0.09	0.40	0	3	18	7	5	e.	U. S. Weather Bureau.
Phoenix (1)	....do	1,092	24	61.5	− 5.1	91	30	35	1†	47	0.56	+ 0.18	0.42	0	2	21	6	3	w.	G. Acuff.
Phoenix (2)	....do	1,189	3	63.0	.....	89	24†	37	13	47	0.46	.....	0.34	0	2	20	4	6	sw.	Horne & Armstrong.
Pinal Ranch	Pinal	4,520	18	.....	.....	.....	.....	.....	.....	.....	1.97	+ 1.08	1.09	9.0	5	26	1	3	sw.	Irion & Craig.
Pinto	Apache	5,660	8	.....	.....	.....	.....	.....	.....	.....	0.69	.....	0.26	6.5	6	14	12	4	sw.	Mrs. C. F. Henning.
Prescott	Yavapai	5,320	45	44.8	− 5.7	71	30	21	14†	42	2.26	+ 1.48	0.90	.....	8	.....	.....	.....	.....	J. W. Flinn, M. D.
Quartzsite	Yuma	800	4	65.1	.....	93	24	36	1	44	0.14	.....	0.10	0	3	17	9	4	w.	W. E. Scott.
Redrock	Pinal	1,864	4	.....	.....	.....	.....	.....	.....	.....	0.32	.....	0.24	0	2	.....	.....	.....	w.	W. J. Crowell.
Roosevelt	Gila	2,175	7	61.6	.....	85	30	35	2	41	2.78	.....	2.00	0	4	12	15	3	w.	U. S. Recl. Service.
Sacaton	Pinal	1,280	4	62.4	.....	92	29	36	1	44	0.85	.....	0.77	0	2	.....	.....	.....	.....	E. W. Hudson.
St. Johns	Apache	5,650	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Shreeve.
St. Michaels	....do	6,950	23	43.0	− 3.2	71	30	19	8†	38	0.55	− 0.14	0.30	2.5	3	10	14	6	sw.	Rev. A. Weber, O. F. M.
Salome	Yuma	1,875	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. M. B. Swartz.
San Carlos	Gila	2,456	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss M. A. Bingham.
San Simon	Cochise	3,609	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agt. So. Pac. Co.
Seligman	Yavapai	5,219	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lib. A. T. & S. F. R. R. Co.
Sentinel	Maricopa	685	13	66.2	− 4.4	91	29	42	13	37	0.93	+ 0.76	0.70	0	2	24	3	3	.....	Agt. So. Pac. Co.
Silverbell	Pima	2,650	7	62.7	.....	86	29†	36	12†	35	0.60	.....	0.30	0	2	24	0	6	s.	Imperial Copper Co.
Snowflake	Navajo	5,644	5	46.0	.....	74	29	22	2	45	1.25	.....	0.39	T.	5	1	8	21	sw.	W. J. Flake.
Springerville	Apache	6,862	1	40.8	.....	70	30	17	14	40	0.41	.....	0.35	T.	3	16	9	5	s.	U. S. Forest Service.
Supai	Coconino	3,200	4	56.6	.....	82	23†	33	27	38	0.87	.....	0.42	0	4	.....	.....	.....	.....	O. C. Upchurch.
Tempe	Maricopa	1,165	8	62.2	.....	89	24†	37	1†	39	0.66	.....	0.48	0	2	19	9	2	sw.	F. H. Simmons.
Thatcher	Graham	2,800	9	57.7	.....	93	29	27	13	53	0.13	.....	0.11	0	2	.....	.....	.....	w.	Prof. J. H. Larson.
Tombstone	Cochise	4,550	13	57.2	− 4.8	89	29	28	12	37	0.21	− 0.06	0.12	0	2	24	5	1	.....	F. N. Walcott.
Truxton	Mohave	3,997	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. A. Dennis.
Tuba	Coconino	4,500	11	48.6	− 5.5	76	30	26	20	42	0.86	+ 0.38	0.27	0.5	6	17	13	0	sw.	H. P. Marble.
Tucson	Pima	2,390	31	58.7	− 6.8	90	29	33	13	45	0.28	− 0.05	0.26	0	2	8	17	5	.....	Univ. of Arizona.
Tucson (1)	....do	2,380	4	57.2	.....	90	29†	29	13	52	0.24	.....	0.24	0	1	21	7	2	nw.	J. M. Robe.
Tucson (2)	....do	2,526	2	58.4	.....	89	29	34	13	47	0.28	.....	0.25	0	3	21	7	2	w.	U. S. Coast & Geod. Sur.
Vail	....do	3,421	13	64.8	− 3.4	88	28	42	1	36	0.05	− 0.29	0.05	0.5	1	27	2	1	.....	Agt. So. Pac. Co.
Walnut Grove	Yavapai	3,649	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. O. Carter.
Wickenburg	Maricopa	2,072	14	56.8	− 4.6	86	30	31	6†	48	1.70	+ 1.34	1.00	0	2	20	5	5	w.	Agt. S. F. P. & P. R. R. Co.
Wilcox	Cochise	4,164	30	51.4	− 8.6	80	24	20	21	50	0.11	− 0.04	0.11	0	1	7	0	23	s.	Agt. So. Pac. Co.
Williams	Coconino	6,750	12	39.4	− 8.6	69	30	2	1	48	1.90	+ 1.00	0.80	16.0	8	13	15	2	.....	E. J. Nordyke.
Winslow	Navajo	4,853	4	51.1	.....	85	30	23	1	49	0.70	.....	0.30	0	4	25	0	5	.....	J. F. Bauer.
Yuma	Yuma	141	31	65.2	− 4.9	91	29	39	13	41	0.10	0.00	0.10	0	1	25	5	0	w.	U. S. Weather Bureau.
Yuma (1)	....do	150	5	61.6	.....	87	29	33	13	47	0.06	.....	0.06	0	1	17	10	3	w.	E. L. Crane.
Nevada.																				
Caliente	Lincoln	4,407	2	45.6	.....	70	30	20	24	44	1.00	.....	0.30	3.0	5	19	1	10	se.	Salt Lake Route.
Logan	Clark	1,700	5	60.0	.....	84	7	35	1†	40	0.63	.....	0.37	0	5	23	6	1	s.	O. W. Jarvis.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 9, Colorado Valley.*

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Wyoming.																																
Battle Mountain	Snake					.01				T.	T.			.12			.01				.25	.15			T.							0.54
Bigpiney	Green								T.	T.		T.								.10	T.	T.		.25		.15	.10			.30	0.90
Daniel	do						T.				T.		.20							T.	T.	T.			T.					T.	0.20
Eden	do					T.					.02		.01	T.		T.			.06	.08		.07	.06		T.					.14	0.44
Green River	do											.03	.02	.13						.09		.12	T.	T.		T.				.01	0.40
Pinedale	do					T.													T.											.08	0.08
Rambler	Snake																														
Willow Creek Cabin	Green																														
Colorado.																															
Ashcroft	Grand	.15				.03	.02				T.		T.	T.	.02			.03	.03	.05	.17	T.	.02	.10		.10	.05	.03				0.80
Breckenridge	do					T.					.09		T.	.18		T.		T.	.22		T.	T.	T.			.15	.09	T.			0.73
Buford	White										.05			.45				.06		.39	.58	.03				.20	.17	.22			2.15
Cascade	San Juan																														
Cedaredge	Gunnison										.11		.11	.04				.27			.16		.06			.10					0.85
Chromo	San Juan				T.		.25				.20		.30	.05	T.	.22	.08				T.										1.10
Cochetopa	Gunnison					.02						T.		.04	T.		T.	T.		.04	.05		T.			T.				T.	0.15
Collbran	Grand	.02				.04	.05				.10		.27	.13			.01	.46	.09	.11	.78	T.	.02			.14	.01	.18				2.41
Columbine	Yampa					.15					.05		.14	.33		.10			.13	.13	.37	.40	.13				.13	.20				2.26
Columbine Ranch	Gunnison					.15					.28		.15	.20			T.	.70	T.	T.	.32						.65					2.45
Corona	Grand	.48					.34					.34		.70	.64		.34		.84		.32	.24		.62			.48		.46			5.80
Craig	Yampa																.21				.50			.20							0.91
Crawford (near)	Gunnison					.06	.05				.20		.20	.02				.06			.17					.11	.03		.09			0.99
Crested Butte	do				T.	.10					.10		.15	.70				T.		T.	.40	T.	.10		T.	.15	T.					1.70
De Beque	Grand																														
Delta	Gunnison					T.	.02				.02	T.	.02					.27			.10					.35					0.78
Dillon	Grand																														
Durango	San Juan				.04		T.		.08	.21		.38	.08			.35	.12	.14	.14		T.					.04		T.			1.58
Eureka	do					.20						.20	.27	.09				.20	.10	.10	.19	.09					.20	.19				1.83
Fraser	Grand					T.					.10	.10	.45	.15		.05	.05	.42		.10	.05	.05	.15		.15	.05		.10			1.97
Fruita	do	T.			T.	T.				.12	T.	.10	T.				.32	T.	T.	.21	.05				T.		.03			T.	0.83
Glade Park	do										.25	T.	.10	T.				.45		.12	.25	.01				T.		.01			1.19
Gladstone	San Juan																														
Glenwood Springs (near)	Grand											.20	.20					T.		.10	.14					T.	.20				0.84
Grand Junction	do	.01									T.	T.	.02	T.			T.	.19	T.	.05	.06	.01	T.			T.		.02			0.36
Grandlake	do										.21	T.	*	.85	T.	T.		.10	T.	T.	.25	T.	.10	T.	T.	T.	T.				1.51
Grand Valley	do				T.	.05	.02				.20	T.	.12	.08				.01		.16	.44	.01	T.			.01	.01	T.				1.11
Gunnison	Gunnison					T.	.02							.01	.01		T.	T.	T.	.01	.01					.02	.05	.07	.03			0.23
Hesperus	La Plata										.08		.07	.24		.05		.17	.24		.05										0.90
Horsefly	Gunnison										.10		.47	1.08			2.7	.15	.33	.83	.10	.10				T.	T.	.54				3.97
Ironton	do	.16			T.	T.	T.				T.	T.	.73	.43	T.	T.	T.	T.	T.	.37	.39	T.				T.		T.				2.08
Ladore	Yampa																														
Lake City	Gunnison						.11				.09		.25	.15			T.				.08	.02				.06	.08	T.				0.84
Lay	Yampa					.12					T.	T.	T.	T.		T.	T.	T.	T.	.14	.63		.05	.02		T.		.14				1.10
Mancos	San Juan					T.					.58		.18	.20			.02	.20	.10		.22	.04				.11	.07	.06				1.78
Marble	Grand					.20	.05				.22		.68	.28	T.						.24	.45	T.	.08			.12	.65	T.				2.97
Marshall Pass	Gunnison					.24								.17			.22			.18	.35			.17								1.33
Meeker (near)	White									T.	T.		.21					.12			.58		.01			.18		.05				1.15
Montrose	Gunnison	.06				T.	.03						.04	.04				.04	.05	.03	.14					.05	.05					0.53
Nast	Grand					T.					T.		.05	.06				.15	T.		.15	T.	.06			.16	.05	T.				0.69
Pagoda	Yampa																														
Pagosa Springs	San Juan				T.	.01	.32		T.		.32		.32	.13			.28	.08	.11	.03	.22	.05				T.		T.				1.87
Palisades	Grand					T.					T.		T.	T.				T.		T.	.75							T.				0.75
Paonia	Gunnison					.09	.06				.25		.35	.13				.21			.31					T.						1.40
Parshall	Grand																														
Pitkin	Gunnison										.15		.14	.09							.05							.28	.20			0.91
Pyramid	Yampa												.20				T.			.40	.40	T.	T.		T.	.40						1.40
Rangely	White																			.40	.20										0.60
Redcliff	Grand	.23	T.		T.	T.		.29	T.	T.		.38	T.				.16				.15	T.	.10	.10	.13		.18	T.	.30	T.		2.02
Rico	Dolores			.20	T.		.09	.08			.15				.11					.08		.21				T.	.05	.18				1.15
Rifle	Grand	.01				.02					.05		.06	.01				T.		.09	.24	.01	.02			.03	.09	T.				0.63
River Portal	Gunnison										.30		.31	.03				T.		.07	.07					.01	.18		.04			1.01
Sapinero (near)	do	.04				.04	.14				.31		.63	.34	.01		.01	.01	.06	.01	.23	.02				.14	.09	.02	.02			2.12
Shoshone	Grand	.02				.12	.16				.06		.32	.45	.03			.07		.17	.16		.04			.23	.06	.10				1.93
Silverton (near)	San Juan				T.	T.					.30	.08	.39	.31				.08	.09	.10	.20	.29										1.90
Spruce Lodge	Grand	.28					.14				.07		.05	.62	.35			.28	.50		.30	.20	.10	.20		.09	.10	.14	.06				3.48
Steamboat Springs	Yampa					.02					.12			.50						.15	.31	.10	.04	.13			.23	.14			.02	1.76
Tacoma	San Juan					.15	.01				.30		.07	T.			T.	.10	.15	.17	.14	.07				.03		.03				1.22
Telluride	San Miguel	.10				.09	.06				.34		.53	.41	T.			.12	T.	.04	.33	.06				.11	.09	.01	.19			2.48
Terminal Dam	San Juan	.40									.22		.12	.10				.40	.20	.10	.06	.11				.10						1.81
Uncompahgre Plateau	Gunnison					T.						.26	.98	.65	.89		T.	.24	.12	.40												3.54
Yampa (near)	Yampa					T.	.03				T.		.04	.11				.16		T.	.30	.07	.03				.12	.12				0.98
Utah.																															
Aneth	San Juan										.08		.01					.03	.16		T.											0.28
Bluff	do										.02		.02			.02		.19									T.					0.25
Castle Dale	Green																			.20	.10										0.30
Cisco	Grand																														
Dragon	Green				T.						.20		.20						T.	.46	.06		T.	.02		.02		.10				1.06
Duchesne	do	T.									.14	T.	.18	T.					.03	.12			.03			.01		.05				0.56
Elkhorn	do										.10		T.				.02		.30			T.	T.			.02						0.44
Emery	Colorado								T.	T.									.10													0.10
Escalante	do																														
Fort Duchesne	Green	T.				T.					.06	.05	.09				T.	.01	.03	.15			T.			.05		.02				0.46
Fruitland	do										.19	.02	.32							.07			.18		.02			.01			.03	0.84
Grayson	San Juan																														
Green River	Green										.10	T.	.02	.01				.02		.07		T.						.02				0.24
Hanksville	Colorado												.01																.02			0.03
Hite	do										.02	T.	.04				T.		.10		.03					T.		.23		.02		0.44
Hurricane	do										.15	.30	.35									T.				T.						0.80
Kanab	do										.16	.37	.35					.03										.48				1.39
La Sal	Grand					T.						T.		.38			T.	.33				.06				T.	T.	.02				0.79
Loa	Colorado																														
Manila	Green											.05	.11	.20						.03												0.39
Moab	Grand				T.	.05					.26	.01		.13			.05	.04		.10		T.						.01				0.65
Monticello	do																														
New Harmony	Colorado																														
Orderville	do					T.					.26	1.03	.39	.12													.04	.20				2.04

TABLE 2.—*Daily precipitation for April, 1912. District No. 9*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Utah—Continued.																																
Pine Valley	olorado									.08		.15	.67	.05		T.		.04	.20				T.									1.19
Price	Green																															3.10
Ranch	Colorado				T.				T.	.67	.85	.76	.72	.10																	
St. George	do											.16	.10				.11									.11					0.48
San Rafael	Green																															
Scofield	do										T.	.04	.45	.13			T.		.02	.05		.02	.01		.03	.01		.01				0.77
Springdale	Colorado																															
Sunnyside	Green																															
Strawberry Tunnel (East).	do					T.				T.	T.	.20	.58	.23			T.		T.	.19	T.	T.	.10		T.	.08						1.38
Teasdale	Colorado										.06	.08	.05							T.	T.					T.		.10				0.29
Thompsons	Green										.19	T.		.41				.30	.04	.11								.09				1.14
Tropic	Colorado										T.	.20	.30				T.											.70	T.			1.20
Troutcreek Ranger	Green																															
Vernal	do										.08		.25					.02	.03	.18			.66					.07				0.99
White Rocks	do										.24	.02	.07	.02			.02		T.	.30		T.	.03			.02						0.72
Woodside	do										.14		.15						.10									T.				0.39
New Mexico.																																
Alma	Gila				T.	.30	T.	.15	T.	T.			.03			T.	T.		T.													0.48
Aragon	do					T.		.10					.15			.05		.60														0.90
Aztec	San Juan					T.					.17		T.	T.			T.	.06	.02		T.											0.25
Bergers Ranch	Little Colorado										.26		.71	.18		*	.32	.19	.16								T.					1.82
Blackrock	do															.07				.12									.02			0.21
Bloomfield	San Juan					.05	T.			T.	.15	T.	.03			T.	T.	.20	.10	T.	.04					T.		T.				0.57
Cambray	Mimbres					.40		.53							.03																	0.96
Cliff	Gila																															
Columbus	do					.30		.47								T.	.09															0.86
Deming	Mimbres							.68																								0.68
Dulce	San Juan																.20		.18													0.38
Fort Bayard	Mimbres				T.	T.	T.	.11	T.				.04	T.			T.															0.15
Fruitland	San Juan											.02		.02				.36	.12													0.52
Gage	Mimbres							.90																								0.90
Gila Planting Station.	do				T.	T.	T.	.10	T.				*	.12			T.	T.	T.													0.22
Hachita	Gila					T.		.62					.07																			0.69
Haynes	San Juan						.28				.14		.05				.16	.18	.05													0.86
Hermanes	Gila					T.		.37																								0.37
Lordsburg	do												.07																			0.07
Luna	do					T.		T.		T.							.20	.05	T.								T.					0.25
Mimbres	Mimbres							.06					.14																			0.20
Pinos Altos (near)	Gila					.04		.16					*	.40																		0.60
Pratt	do							.04																								0.04
Redrock	do								T.																							T.
Rodeo	do																															0.00
Silver City	Mimbres			T.			.04	.13	T.				.10			T.	T.															0.27
Arizona.																																
Allaires Ranch	Sonora					.06						.01	.07				T.															0.14
Alpine	Gila												1.02			.05	.01	.40														1.48
Aztec	do					.27						.38																				0.65
Benson	San Pedro												.32																			0.32
Bisbee	do												.48				.11															0.59
Bowie	Gila																															0.00
Buckeye	do					.08						.60	T.																			0.68
Canille	San Pedro			T.									.21	T.		.19	T.															0.40
Casa Grande	Gila												1.25																			1.25
Casa Grande Ruins	do					.17							.95																			1.12
Cavecreek	Verde					.04							.60																			0.64
Chin Lee	San Juan					T.	.09				.04		.47			T.	.02	T.	T.									.03				0.65
Chlarsons Mill	Gila																															
Clifton	do							T.			.06		.04				.14		T.													0.24
Cline	Salt																															
Cochise	Desert																															
Columbia	Agua Fria									.20		.10	.59				.32															1.21
Courtland	White						.06																									0.06
Dos Cabezos	Desert												.47																			0.47
Douglas	Sonora												.05			.03	.01															0.09
Dudleyville	Gila			T.			.15	.03		T.	.05	T.	.28		T.	.14	T.	T.	T.													0.65
Fairbank	San Pedro						.09																									0.09
Flagstaff	Little Colorado						.02			.38	.30	.41	.34			T.	T.	.25	T.							T.		.28				1.98
Flagstaff (1)	do																															
Flagstaff (2)	do						.16							.03				.23	.05								.35					0.82
Florence	Gila													1.10																		1.10
Fort Apache	Salt						.05	.11		.25		.36				.07	.24															1.08
Fort Huachuca	San Pedro											T.	.60			.40																1.00
Fort Mohave	Colorado																															
Gila Bend	Gila																															0.00
Globe	Salt						.10					.16		.59	.12		.05	.01															1.03
Grand Canyon	Colorado					T.					.60	.50	.10										T.				T.	.10				1.30
Grand Canyon (1)	do																															
Granite Reef Dam	Salt					.23					.01	.02	.72																			0.98
Hereford	Gila							.10					.08																			0.18
Holbrook	Little Colorado										.24						.18	.12		.90												1.44
Indian Oasis	Desert																															
Intake	Salt												.95																			0.95
Jerome	Verde					.12	.12				.50	.77	.62					.10	.14													2.37
Keams Canyon	Little Colorado	.01					.07				.16		.35				T.	.02			T.						.24					0.85
Kingman	Colorado																															
Lakeside	Little Colorado					T.	.14				.31		.90				.25		.25		T.											1.85
Lewis Springs	San Pedro						.03						T.			T.																0.03
Maricopa	Gila					.18						.33																				0.51
McNeal	Desert												.16			.02																0.18
Mesa	Salt					.20						.40	T.			T.																0.60
Mohawk Summit	Gila																															0.00
Naco	San Pedro												T.			.09																0.09
Natural Bridge	Verde					.48					.22		1.10					.15										T.				1.95

TABLE 2.—*Daily precipitation for April, 1912. District No. 9*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Arizona—Contd.																																
Oracle	San Pedro												.05			.03																
Osborn	do								.25				.62																		0.08
Paradise	Desert											.50																			0.87
Parker	Colorado																														0.50
Payson	Verde																														
Phoenix	Salt					.12	T.					.26	.14			T.															0.52
Phoenix (1)	do					.14						T.	.42																		0.56
Phoenix (2)	do					.12						.34																			0.46
Pinal Ranch	Gila	.05					.48				.14		1.09	.26																	1.97
Pinto	Little Colorado					.07	.05			.04			.26				T.		.20			T.					T.				0.69
Prescott	Hassayampa								.25	.35	.23	.90	.41	.02		T.		T.	.05									.05			2.26
Quartzsite	Colorado					.02				.10			.02																		0.14
Redrock	Santa Cruz					.08							.24																		0.32
Roosevelt	Salt					.65				.12		.01	2.00																		2.78
Sacaton	Gila					.08							.77																		0.85
St. Johns	Little Colorado																														
St. Michaels	do											.10	.15			T.	.30	T.	T.									T.			0.55
Salome	Colorado																														
San Carlos	Gila																														
San Simon	do																														
Seligman	Verde																														
Sentinel	Gila					.23						.70																			0.93
Silverbell	Santa Cruz							.30					.30																		0.60
Snowflake	Little Colorado					.30					.18						T.	.39	.30		.08							T.			1.25
Springerville	do						T.		T.				.05						.35	.01							T.				0.41
Supai	Colorado					.06						.30					.09						.42								0.87
Tempe	Salt					.18							.48			T.															0.66
Thatcher	Gila							T.					.11			T.	.02														0.13
Tombstone	San Pedro					.09							.12																		0.21
Truxton	Colorado																														
Tuba	Little Colorado					.05						.20	.10	.13			.11											.27			0.86
Tucson	Santa Cruz					.02	T.						.26																		0.28
Tucson (1)	do												.24																		0.24
Tucson (2)	do					.02	T.	T.				.01	.25			T.															0.28
Vail	do												.05																		0.05
Walnut Grove	Hassayampa																														
Wickenburg	do									.70		1.00																			1.70
Willcox	Desert												.11																		0.11
Williams	Colorado										.20	.10	.80	.20			.10	.20	.10			.10					.20				1.90
Winslow	Little Colorado						.20						.30			T.	T.											.10			0.70
Yuma	Colorado									T.		.10																			0.10
Yuma (1)	do					T.	T.			T.		.06																			0.06
Nevada.																															
Caliente	Colorado									.20	.30	.10	.30														.10				1.00
Logan	do									.05		.04	.37					.16									.01				0.63

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations for April, 1912. District No. 9, Colorado Valley.*

Date.	Wyoming.				Colorado.										Utah.										New Mexico.			
	Daniel.		Green River.		Durango.		Grand Junction.		Gunnison.		Meeker.		Steamboat Springs.		Emery.		Fort Duchesne.		Hite.		Moab.		St. George.		Bloomfield.		Fort Bayard.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	42	12	61	6	53	21	56	32	.....	.....	47	28	44	7	51	14	53	24	67	38	63	32	68	31	58	29	56	24
2....	45	10	59	19	58	23	64	32	50	15	55	22	47	11	52	15	64	24	69	37	66	33	73	31	63	20	60	32
3....	43	3	63	8	61	27	69	38	48	12	60	25	51	13	49	20	66	26	73	39	73	33	77	38	74	29	62	36
4....	45	15	60	25	57	32	67	45	55	18	60	30	57	22	55	17	65	36	74	45	71	45	78	45	67	35	66	46
5....	41	12	49	27	56	36	59	44	56	13	52	30	49	27	60	18	62	36	69	45	68	42	73	48	66	38	64	40
6....	40	13	54	19	60	35	62	34	50	23	50	23	44	24	58	20	60	21	72	45	68	33	76	38	65	36	60	34
7....	43	8	67	15	59	29	66	36	57	20	61	23	53	10	62	15	67	23	74	40	74	31	82	36	65	36	52	33
8....	49	15	68	19	52	29	67	34	55	15	64	24	50	12	60	29	70	25	70	49	72	45	78	54	56	30	50	31
9....	47	14	66	20	61	27	70	35	.....	.....	63	22	52	15	57	30	71	27	76	44	76	43	60	43	70	31	62	33
10....	42	15	42	29	46	32	59	36	.....	.....	58	27	47	17	48	26	63	37	61	45	66	41	59	43	57	32	59	37
11....	47	16	58	18	54	31	62	40	.....	.....	59	26	53	18	42	21	58	29	63	47	65	45	52	47	64	33	62	33
12....	41	21	45	27	38	24	48	31	55	19	50	33	50	23	46	22	48	32	48	38	50	41	51	36	47	26	59	31
13....	37	15	39	24	41	24	52	33	37	20	43	26	38	25	52	28	52	27	63	40	59	34	61	29	50	21	49	25
14....	40	20	50	21	50	23	56	27	45	17	49	18	43	26	55	26	57	20	65	35	63	28	65	36	56	27	58	32
15....	42	17	56	19	54	28	61	32	49	15	58	21	51	20	51	25	61	24	70	39	67	29	72	37	60	27	56	37
16....	41	15	54	20	51	29	62	35	50	14	54	23	51	15	52	28	61	28	67	40	69	34	72	40	61	31	59	32
17....	37	14	55	16	49	31	54	36	51	21	49	38	42	28	55	29	57	35	68	46	69	42	67	37	50	31	60	31
18....	46	15	52	18	45	26	51	34	48	15	54	20	51	28	57	24	53	24	63	45	59	32	71	36	50	29	60	32
19....	38	10	41	21	48	31	46	33	49	18	38	26	46	23	58	32	47	29	62	43	61	38	60	40	50	33	62	35
20....	31	8	44	20	44	28	51	30	38	25	42	24	34	24	48	22	50	29	61	38	58	32	64	28	51	29	58	37
21....	36	13	42	23	45	26	51	32	42	10	45	22	46	27	50	24	53	28	61	37	57	33	66	29	54	28	57	35
22....	37	15	49	12	56	22	58	31	47	20	47	25	43	16	58	21	55	26	69	36	65	29	69	32	62	21	65	36
23....	45	15	58	20	61	27	62	31	54	22	53	23	52	27	63	30	60	21	72	39	67	26	78	32	64	23	66	33
24....	41	17	62	28	67	32	73	40	60	24	63	25	53	29	67	32	67	28	79	43	76	34	80	38	77	37	72	35
25....	40	18	50	26	54	34	59	42	51	30	50	32	66	27	54	23	59	30	65	48	65	40	67	43	62	39	67	39
26....	39	15	54	20	53	26	60	36	51	15	54	25	53	17	56	25	61	25	65	40	70	32	63	41	62	23	66	36
27....	41	16	59	28	51	32	60	41	56	24	49	35	47	28	55	21	61	39	64	45	69	46	70	42	60	40	66	31
28....	50	17	61	19	63	30	64	35	58	21	60	23	55	20	56	22	66	26	71	40	71	35	76	38	65	33	70	34
29....	51	15	63	31	67	34	68	46	61	23	64	32	61	23	56	23	68	38	79	50	74	50	80	49	73	36	74	44
30....	43	16	.....	27	68	34	72	46	61	23	62	40	59	24	55	24	63	41	78	57	77	51	78	39	76	36	75	44
Mns..	42.0	14.2	54.5[a]	20.8	54.1	28.8	60.3	35.9	51.3[d]	19.2[d]	53.8	26.4	49.8	20.9	54.6	23.5	60.1	28.6	67.9	42.4	66.9	37.0	69.5	38.5	61.2	30.6	61.7	34.7

Date.	Arizona.																				Nevada.	
	Bisbee.		Flagstaff.		Fort Apache.		Grand Canyon.		Parker.		Phoenix.		Prescott.		St. Michaels.		Tucson.		Yuma.		Logan.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	54	29	48	26	65	23	53	26	82	38	69	38	52	22	49	28	63	35	79	43	74	35
2	64	35	55	22	65	32	56	28	86	55	79	45	54	31	60	22	79	39	84	47	78	38
3	66	44	57	22	68	30	55	28	88	55	83	60	67	36	59	26	78	49	84	56	79	46
4	66	50	56	30	64	35	49	30	88	56	81	57	61	38	62	37	81	60	80	52	78	48
5	61	46	49	30	62	33	52	32	80	56	71	51	62	38	67	34	72	44	71	51	75	51
6	57	37	55	29	62	32	54	34	85	53	71	49	63	29	58	31	61	40	80	46	79	44
7	59	37	55	26	62	33	56	35	89	62	78	50	64	31	61	23	73	42	86	49	84	45
8	61	31	53	28	68	36	55	38	85	61	78	52	63	35	58	19	77	47	86	61	82	51
9	67	40	54	28	62	30	49	36	82	52	75	52	47	31	59	28	79	49	67	56	78	48
10	62	40	42	27	35	30	48	34	78	50	70	50	46	30	59	30	72	46	74	51	64	42
11	60	40	39	28	50	30	40	30	69	45	68	46	46	30	56	35	66	41	69	46	61	45
12	50	33	29	20	55	28	33	26	73	45	59	44	38	25	49	19	50	37	66	41	60	37
13	52	28	36	20	52	26	34	20	80	50	64	41	44	22	42	19	62	33	70	39	66	35
14	62	32	45	13	56	35	38	23	83	50	70	44	54	21	54	26	68	34	78	47	69	42
15	58	41	47	23	61	28	39	28	82	50	76	52	54	21	51	23	68	45	83	50	74	41
16	59	38	49	26	62	30	35	34	85	55	77	53	57	30	49	30	70	44	83	47	76	49
17	64	40	48	29	60	34	55	32	85	60	79	55	58	36	50	32	75	46	84	52	76	45
18	64	40	52	23	61	32	60	35	85	59	79	52	59	32	52	38	76	45	86	55	77	44
19	64	47	48	34	55	36	55	35	79	52	76	54	53	38	53	38	78	48	77	53	75	39
20	63	42	45	20	58	37	56	36	74	54	70	51	53	25	46	20	66	45	74	48	68	35
21	62	43	47	22	66	26	54	22	79	50	73	45	57	24	50	25	71	38	79	47	72	40
22	68	36	54	23	75	27	55	29	84	45	76	47	63	31	58	28	78	36	85	44	75	56
23	74	43	58	21	70	29	54	28	90	55	85	46	68	26	66	23	85	40	90	51	82	42
24	72	49	58	28	63	33	55	18	89	56	86	53	68	32	66	38	83	44	89	52	81	42
25	69	46	49	30	66	33	53	21	84	54	77	52	65	38	55	28	77	46	83	55	77	54
26	70	43	53	27	57	31	50	28	79	55	83	52	63	38	59	34	84	41	85	48	77	46
27	64	47	44	29	73	40	54	29	82	55	73	52	68	33	55	32	82	41	81	48	77	42
28	71	39	58	23	75	40	52	34	80	50	80	52	66	30	63	30	80	40	88	50	81	46
29	77	48	62	36	77	34	55	30	79	50	88	54	69	35	68	38	90	46	91	50	82	63
30	77	49	65	36	.....	35	54	21	92	55	87	57	71	44	71	38	88	48	89	58	82	46
Mean	63.7	40.4	50.3	25.8	62.2[a]	31.9	50.3	29.3	82.5	52.8	76.0	50.2	58.4	31.1	56.8	29.3	74.4	43.0	80.7	49.8	75.3	44.6

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 10, GREAT BASIN.

ALFRED H. THIESSEN, District Editor.

GENERAL SUMMARY.

This month will long be remembered as one of the coldest of its name ever experienced in this district. The mean temperature averaged considerably below normal and much lower than the average for April, 1911. The cold weather was quite uniform throughout the month, there being no periods of high or exceptionally low temperatures.

Frosts occurred frequently, but owing to the backward condition of the fruit, the losses were small and local, as far as can be estimated at this time.

Precipitation for the district averaged about 30 per cent above normal. There were about eight rainy days on the average, and the excess of cloudy days kept the ground wet.

In general the inclement weather and wetness of the ground were unfavorable for the advancement of farm work and the seasonable growth of all vegetation; but, on the other hand, the continued cold kept the fruit buds from swelling, thus rendering them able to withstand the frosts that occurred during the month. At the close of the month the fruit was just coming into blossom.

TEMPERATURE.

The mean monthly temperature for the district was 42.6°, or 4.2° below normal, and the individual means ranged from 32.4° at Park City, Utah, and at Tahoe, Cal., to 51.0° at Jean, Nev. The temperature chart shows that the highest monthly mean temperatures occurred, as a rule, in the protected valleys of the Utah area and the southern portion of the Nevada area, and the lowest at the more elevated stations.

Practically every station in the district reported temperatures below normal. The greatest minus departure was at Beowawe, Nev., where the mean was 39.8°, or 9.5° below normal.

The weather was moderately warm during the first week of the month, but after that it was uniformly cool, the lower temperatures beginning about the 6th in the Utah area and about the 9th in the Nevada area.

The lowest minimum temperature was 3° at Pinto, Utah, on the 13th, and the following are the lowest readings reported from other States in this district: 9° at Cokeville, Wyo., on the 1st and other dates; 20° at Grace, Idaho, on the 7th; 13° at Tahoe, Cal., on the 12th; and 11° at Millett and Potts, Nev., on the 12th.

As a rule, the highest temperatures occurred during the first decade; 62° was registered at Evanston, Wyo., on the 14th; 71° at Weston, Idaho, on the 8th; 81° at Iosepa, Utah, on the 10th, which was the highest in the district; 62° at Truckee, Cal., on the 8th; and 79° at Jean, Nev., on the 8th and other dates.

The greatest daily range was 53° at Quinn River Ranch, Nev., on the 2d, when the maximum was 74° and the minimum was 21°. The greatest local monthly range was 60° at Pinto, Utah.

PRECIPITATION.

Precipitation averaged 1.64 inches for the district, which is 0.45 inch above the normal. The precipitation chart shows a very uneven distribution of moisture throughout the district, the larger amounts occurring on the western slope of the Wasatch Mountains in Utah, in the southern portion of the Nevada area, and in the east-central part of the California area. When the precipitation amounts are studied with reference to the normal amounts inequalities are again very apparent. Amounts above normal occurred almost without exception in the Utah area, while in other portions of the district there were wide deviations from the normal, both above and below.

Precipitation occurred, as a rule, during the last two decades, but there were quite general showers in all parts of the district on the 5th. The heaviest rains for the district centered around the 11th and 19th, and in the California area generally heavy rains occurred also around the 25th and 29th.

The largest monthly amount was 7.32 inches at Deer Park, Cal.; the least was 0.08 inch at Lemay, Utah.

MORE SNOW MEASUREMENTS.

The activity of the local office of the Weather Bureau at Salt Lake City in measuring the water equivalent of the snow in Maple Creek Canyon, Utah, for two seasons has led at least two others to attempt like work.

Mr. B. F. Eliason, of Moroni, Utah, measured the snow in a small watershed in the vicinity of Moroni, and the city engineer of Salt Lake City also made quite a complete snow survey of Big Cottonwood watershed. Mr. Sylvester Q. Cannon, assistant city engineer, was in charge of the work under the supervision of the city engineer and has kindly prepared a report which appears in another part of this Review.

DOES FROST FIGHTING PAY IN UTAH?

By J. CECIL ALTER, Observer, U. S. Weather Bureau.

Notwithstanding all the evidence that has been brought forth to show that it pays to fight frost with fire in the Utah orchards, the fact remains that probably more than 90 per cent of the fruit growers of the State are not yet convinced that it pays, and therefore are not utilizing this means of insurance.

Hoping to adduce some new evidence for use in answer to this great question, a little examination has been made of the cost of frost fighting and of the weather conditions in representative Utah fruit regions to ascertain, if possible, whether frost could have been successfully combatted in the past. The general results of the study are given briefly herewith.

The query "What does it cost to heat?" has an exceedingly elusive answer, for not only are facts scarce, but those available present a surprisingly wide range of

values. However, from a number of authoritative sources, material and labor costs have been obtained that seem to present sufficient similarity to warrant taking a mean of them for the purposes of this superficial study.

The oil cost is 6 cents per gallon at the railroad; the coal cost is $4 per ton at the railroad; orchard heaters, including the pro rata cost of tanks, wagons, and other accessories, have been placed at $35 per acre as a fixed investment.

Fuel-consumption figures have been gathered from every available source, and for every possible condition. The average of all such values obtained is a little less than 16 cents per acre, per hour, per degree (below 30°), but 18 cents per hour, per acre, per degree has been used for a better margin of safety. Thirty degrees has been used as the "dead line," and the average rate of temperature fall, determined from a number of thermograph records, has been used as 1° fall per hour. Therefore a temperature of 28° is assumed to require 2 hours heating, and a temperature of 26° will require twice as much heat and twice as long.

From all the figures available, the average cost of labor seems to be about 20 cents per hour, per acre. The deterioration of the pots, tanks, and wagons represented in the fixed investment can not reasonably be figured at less than 10 per cent per year, which is $3.50 per acre; the interest on the money invested, at 6 per cent, is $2.10 per acre, which is, of course, a legitimate charge against the cost of firing. A safe estimate (in Utah generally) is that one may expect to fire 5 nights each spring, an average of 5 hours per night, or, 25 hours per season. The fixed charges of depreciation and interest divided by 25 hours to reduce it to a usable unit, gives about 22 cents per hour for all degrees of temperature as a fixed charge for firing, in addition to the cash outlay for fuel and labor.

These values, while not perfectly accurate—for no absolutely accurate statement of this nature can be made for obvious reasons—are probably so nearly correct that it has been considered safe to present them to the fruit grower in this connection.

Therefore, orchard heating costs the fruit grower (figured as conservatively as it may be, for perfect safety) 60 cents per acre, per hour, per degree for the first degree; that is, 60 cents per acre per hour for heating from 29° up to the assumed average safety at 30°; but only the labor and fuel increase as the temperature falls lower, the fixed charge of 22 cents remaining the same. However, since in colder weather the orchard heating work is longer and harder, the labor cost has been raised to 22 cents per hour per acre for each additional degree, and this with the 18 cents per hour per acre per degree for fuel makes a constant increase of 40 cents per hour per acre for each additional degree of temperature raise. From this we have the following figures showing the approximate cost per acre for heating:

	Per acre.
29° to 30°	$0.60
28° to 30°	1.00
27° to 30°	1.40
26° to 30°	1.80
25° to 30°	2.20
24° to 30°	2.60
23° to 30°	3.00
22° to 30°	3.40
21° to 30°	3.80
20° to 30°	4.20

In this computation, when the temperature has fallen below 20°, the heating has arbitrarily been considered a failure. Also, these figures assume that 90 per cent, or more, of the crop is to be saved for these costs; for in all obtainable cost figures where the statement was made that a certain percentage of the crop was saved, the cost figures have been arbitrarily raised to indicate values corresponding to 100 per cent of the crop saved.

These basic values are slightly higher than the average of those supplied by the manufacturers of heaters, but they have been exceeded occasionally by fruit growers who claim to have exercised a great deal of care and economy in heating; therefore, if the orchardist is calculating the cost of frost insurance, his own personal equation will necessarily enter very largely into the matter; and, in any case, the above cost values are about as low as they can be placed with conservatism from the grower's viewpoint. When the cost has greatly exceeded these values it is highly probable that it was unnecessary, or due to stress of circumstances entirely outside usual legitimate smudging considerations.

However, these chance costs, or accidental increases in the cost, such as delayed fuel shipments, sickness to animals or help, and bad roads, which may not only increase the firing cost, but make firing impossible on a dangerous night, must necessarily enter into the consideration; but just what value is to be placed on them and on the so-called personal equation in handling the work of the man who heats, as a charge into the cost of firing, probably no actuary could calculate from the data obtainable.

The opinion has been expressed that these accidental expenditures have been the cause of much of the apathy of the growers toward the firing question. The business of firing presents so many chances for small leaks that the average farmer is unable to stop them all, it has been claimed. For instance, the waste of fuel in handling, while it is in many cases a considerable quantity, is very small compared with the fuel lost by indiscreetly heating when it is not necessary, due to faulty information from poor thermometers, or to no thermometers at all, or to improperly exposed thermometers; or with the fuel and labor lost by not happening to have pots or fuel sufficient to maintain a safe temperature throughout the cold snap. Again, the firing may, for some unpreventable reason, be delayed so late that the safety temperature can not be regained at a reasonable cost, and losses will result from this source; or there will be too many pots lighted, through lack of experience, and a greater temperature maintained than is necessary, and thus another leak appears in the system. A similar leak comes from the fear, born of inexperience, that properly to protect, the pots must be lighted considerably in advance of the coming of the killing cold.

It is also a much-mooted query, despite the many reassurances, whether the soot-laden and smoke-covered pollen can continue its fertilization work unhindered, or whether the pollen really does become contaminated from the fires. The doubt about this question has apparently caused a great many others to demur to making the fight with the frost. Probably the greater proportion of the nonsmudgers, however, state simply that "if we can not average paying fruit crops through 10-year periods without artificial protection against the elements, then we are not in a fruit country."

Against the claim in many places that "the man who fired had a full crop, while his neighbor who did not fire had nothing," the counter claim, usually not published, is made that the nonsmudger actually had the better crop; there are also evidences in plenty that men who

have fired "successfully" are now among the ranks of those who do not, and will not, fight frost again with the means and methods now in use. Still, one more reason for not fighting frost is presented in many places, and that is that the period of safety in the buds has not been satisfactorily settled, for, it is claimed, some buds may withstand a temperature of 26° in safety, while others on the same tree may be killed at 31°; and this question, unanswered satisfactorily to many fruit growers, has kept them from the "firing ranks."

The segregated locations of the orchards in the State, and the varying conditions in the more closely compacted fruit-growing communities up and down the air drainage slopes, presenting varying stages of development and progress in the fruit, are two reasons why community or neighborhood firing can not obtain very generally here. And the lone grower on the slope who has prepared to fire is often finally dissuaded because his neighbors will not assist him to "heat all outdoors." In many cases in Utah the grower, heating his orchard alone, has concluded it does not pay, as he watched the heat and smoke from his fires sweep down into the valley away from his orchard on a 15 or 20 mile mountain breeze, rendering his smoke and heat blanket quite ineffective over his own trees.

Another thing that deters many fruit growers from firing is the very intricacy of the problem, when conducted along strictly scientific lines. To study the air drainage of the orchard, map it for temperature pockets and windy ridges, danger zones and safety belts, then distribute pots, and fire accordingly, after making a careful study of the horticultural problems involved, and make all purchases (with the "profits" of a crop not yet borne), and manage all affairs in connection with the work, is, unfortunately, too tangled a matter for many an intelligent grower.

But, assuming the figures hereinbefore presented to be the basis for calculating all legitimate charges against the cost of frost fighting in Utah, the next query is, "How often could we have fired safely in the past; how often would we have failed; and what would it have cost?" for figures of the past weather are the only possible guide to what the future weather will be.

In an endeavor to furnish the reply to this query, in a general way, the following figures have been taken from the records of the weather, kept by cooperative observers of the United States Weather Bureau, with standard pattern instruments, at Corinne, Boxelder County, and Provo, Utah County, each representing large orchard districts. The mornings on which minimum temperatures fell below 30° are counted from April 10, the probable average date of frost danger to fruit; though if the previous few weeks were warm an earlier date has been used, and if the previous weather was cold a later date has been used. The table showing the cost of firing will be remembered in examining these tables.

Periods of frost damage in the past.

CORINNE.

1897. Firing would have been necessary 1 night, with 29° minimum, therefore the cost would have been 60 cents per acre.
1898. No damaging temperatures occurred.
1899. Firing would have been necessary 14 nights, making a total cost of $23.20 per acre for that year.
1900. No damaging temperatures occurred.
1901. Firing would have been necessary 2 nights; total cost, $2.40 per acre.
1902. Firing would have been necessary 4 nights; total cost, $4.40 per acre.
1903. Firing would have been necessary 6 times; total cost, $12 per acre.
1904. No damaging temperatures occurred.
1905. Firing would have been necessary once; total cost, $1.80 per acre.
1906. Firing would have been necessary once; total cost, $1 per acre.
1907. Firing would have been necessary 4 times; total cost, $3.60 per acre.
1908. Firing would have been necessary 5 times; total cost, $3.80 per acre.
1909. Firing would have been necessary 9 times; total cost, $15 per acre.
1910. Firing would have been necessary twice; total cost, $2 per acre.
1911. Firing would have been necessary 15 times; total cost, $32.20 per acre.

PROVO.

1898. Firing would have been necessary twice; total cost, $2 per acre.
1899. Firing would have been necessary 4 times; total cost, $4.40 per acre.
1900. Firing would have been necessary 4 times; total cost, $3.60 per acre.
1901. Firing would have been necessary once; total cost, $1.40 per acre.
1902. Firing would have been necessary 4 times; total cost, $4.80 per acre.
1903. Firing would have been necessary twice; total cost, $2.40 per acre.
1904. Firing would have been necessary twice; total cost, $2.80 per acre.
1905. No damaging temperatures occurred.
1906. Firing would have been necessary once; cost, $1.40 per acre.
1907. Firing would have been necessary 5 times; total cost, $7 per acre.
1908. Firing would have been necessary 4 times; total cost, $6 per acre.
1909. Firing would have been necessary 8 times; total cost, $14.40 per acre.
1910. Firing would have been necessary 3 times; total cost, $7 per acre.
1911. Firing necessary 3 times before the fruit was lost; total cost, $10.20 per acre, and the crop was lost.

WHY THE SNOW SLIDES FROM THE MOUNTAIN SLOPES.

By J. CECIL ALTER, observer, U. S. Weather Bureau.

Snowslides and avalanches of various dimensions are quite common in the Wasatch Mountains during warm periods in winter and in the early springtime; and while it is quite apparent that when the weight of snow becomes very great on a steep slope the whole mass will be easily forced from its footing, the reason is not nearly so plausible why a broad expanse of snow having a uniform depth that has lain in apparent safety several weeks after falling will, under certain conditions of weather or internal texture, become so delicately poised that the flutter of a bird on its surface, or, as has been said, even an echo, will send several acres and thousands of tons of snow on a devastating journey down the mountain side.

From general observations it is apparent that the depth of the deposit, in itself, has very little to do with its stability or its tendency to cling to the mountain surface, for, while we hear mostly of the slides in the deeper snows, there are ample evidences that snow layers even less than a foot thick have slid from where they were originally deposited and become scattered along the lower slopes. A slide of this kind is seldom dangerous, and it is only when one inadvertently walks out on such a soft mass with web snowshoes that there is any particular danger. However, on less than a 40° slope (40° from the horizontal) and where the soil underneath is frozen, there is practically no danger of a slide even if the snow layer is 2 feet deep.

It will not be forgotten by the snowshoe mountain climber, however, that when the snow layer, even on a frozen slope of only 40°, is 3, 5, or 7 feet deep, there is probably a sharp demarcation surface somewhere in the mass, separating two falls of snow, and if the lower layer had its surface frozen before the upper layer was deposited there is grave danger of a slide of the upper layer along

this surface if one walks upon it. It takes more than a bird's flutter or an echo to start a slide of this kind. A slide like this may possibly occur on a 35° slope provided it be only a short distance above a steeper slope, that is, near a ledge or a steeper declivity.

A slide of this kind can not be foreseen, and there is only one evidence of reasonable safety that presents itself, as a sign of security, and that is the protrusion of a great many shrubs, saplings, and trees through the snow. The snow very seldom slips along the ground where there are a great many small trees or saplings, and reasonable safety nearly always lies among the protruding bushes. About the only exception to this rule is where the snow surface is crusted and recent deposits of fine dry snow have accumulated in limited drifts or patches on the crust; these powdery deposits are sometimes treacherous, even among the trees, and may slip under one's weight, carrying the entire drift, perhaps an acre or more in extent, down the slope to be shattered among the trees.

A tendency for the entire snow layer to lose its hold and go dashing down the slope may be expected on almost any slope, timbered or bare, that is steeper than 40°, after a period of warm rainy weather. It is true, there are very few outward evidences of the downward creeping of the snow layer that will serve to warn the traveler, except that among the thinner, smaller bushes protruding through the snow layer, the bushes will have begun to lean a little; though a very slight leaning probably signifies imminent danger. Also, one may hear the occasional slumping or settling of the layer when in a dangerous region. Either of these evidences should be accepted as a warning to quickly seek flatter and safer territory.

Business taking one into the mountains where there are many long steep slopes carrying several feet of snow must be very important to justify the risk, if there have been a few days of unusually warm weather, with perhaps some rain; for such weather conditions are sure to cause the melting snow and the falling rain to leach down through the snow layer and break up its texture, leaving it a heavy, mushy, insecure mass, or, to use the common expression for this condition, the snow is "rotten." A great weight of this kind of snow, eaten full of vertical and criss-cross drain seams, and no longer held together in a tough, tenacious body, is very insecure and is especially dangerous if the ground and surface leaves and shrubbery underneath are unfrozen, and are wet and slippery from the snow drainage. Conditions of this kind are readily detected by alpenstock examinations and by the supporting strength of the snow.

Most of the heavier avalanches, judging from old avalanche trails in the bent and broken timber, go down the ravines and gullies. These natural drainways are often quite steep sided and deep, and when filled to the level of the adjacent regions with heavy, rotten snow, having in them very little obstruction in the way of sharp curves or stones, and of course no trees, the snow appears to let go quite suddenly, without noise or warning, and go piling and crashing down the gulch. A mass of wet snow is very readily compacted under pressure into the consistency of ice, and, as the avalanche gains momentum, these ice masses can not come to rest until comparatively level land has been reached; therefore, trees and stones, and often large jutting portions of the earth, are carried away by them.

The presence of these danger-lurking ravines is always indicated by a swale in the mountain side, centering somewhere near the gully, and by the general absence of trees and shrubs directly over it, and occasionally by side cliffs showing above the snow.

In the springtime after a winter of heavy snow, when warm weather and rains are frequent, snowslides are quite numerous, though not always large, and not always reaching the bottoms. During such conditions as these the mountain traveler will find it to his interest to avoid the untimbered or bare slopes, and even the timbered slopes whose surfaces point downward more than 35° from the horizontal.

MEASUREMENT OF SNOW IN BIG COTTONWOOD CANYON, UTAH.

By SYLVESTER Q. CANNON, Assistant City Engineer, Salt Lake City, Utah.

The investigation of the source of the water supply and the probable quantity available for each season in any community is of prime importance. The matter of the supply available for Salt Lake City, particularly during the late summer, fall, and early winter is worthy of careful consideration. Among the sources from which this city derives its water supply Big Cottonwood Creek assumes considerable prominence both because of the purity of the water and the quantity discharged. Of all the streams draining into the Jordan Valley this creek has the largest run-off. Besides the water used by Salt Lake City this stream furnishes water for the irrigation of a large portion of the land on the east side of the valley, and for power purposes. Although not the largest watershed draining into the valley, the Big Cottonwood has a larger maximum flow and a more constant discharge.

With the idea in mind of obtaining information relative to the probable supply for the season, and for the purpose of making comparisons of conditions from year to year, the measurement of the snow in Big Cottonwood Canyon was instituted in April of this year. It was undertaken by the engineering department of Salt Lake City, with the advice and cooperation of the local office of the United States Weather Bureau.

In commencing the work of measurement in this watershed it was found that, owing to the greater depth and density of the snow, the equipment which had been effectually used by the Weather Bureau in Maple Creek Canyon was not suitable; so special equipment was made. This consisted of a spring balance of a total capacity of 10 pounds, a jointed galvanized iron tube 2 inches in diameter, in two sections of 5 feet each, and a jointed, graduated wooden pole in two lengths of 6 feet each, shod with a sharp iron point on one end.

Big Cottonwood Canyon is characterized by a number of fairly long branches or forks draining into the main canyon from either side. Different portions of the watershed are distinguished by certain features. For instance, the forks on the north side of the canyon from the mouth up to Maxfield Gulch are very narrow, steep, and rocky, with some straggling pine timber; those from Maxfield Gulch up to Brighton Basin are more open, with gentle slopes and rolling hills covered with quaking aspen and underbrush; and practically all of those on the south side are wider, with steep slopes covered in great part with pine timber. These forks all head in a lofty ridge with peaks rising from 10,000 to 11,600 feet in elevation, which divides Big Cottonwood from Little Cottonwood watershed. In various places on the side slopes of the south forks bare spots occurred, which afforded starting points for snowslides. Most of these forks have been the scene of glacial action. In Mill B South Fork and Mill F South Fork, as well as in the Brighton or Silver Lake

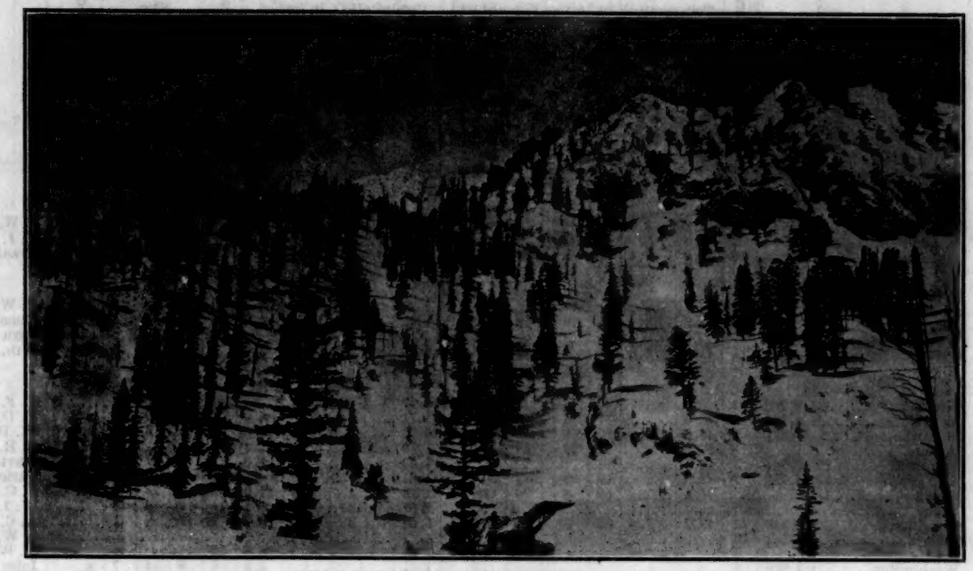
Basin at the head of the canyon, are found some beautiful glacial lakes.

The work of making the measurements of snow covered a period of two weeks. In order to measure every section of the watershed sufficiently to obtain a fair average over the whole, more time is necessary. Because of the length of the various forks, the steep grades, and the condition of the snow, it required a day to cover each fork. Some snow fell every day but one during the trip and made snowshoeing difficult. Having so far to travel and such heavy ascents to make daily, time would not permit of many density measurements of the snow. Further, because of the danger of snowslides, very few measurements could be made on the side slopes in the south forks. For lack of time measurements in Butler, Bear Trap, Willow Patch, and Mill F East Fork on the north side, and Stair Gulch, Mill D South Fork, and Silver Fork on the south side, with some other small gulches, had to be omitted. But as these forks are similar in form, length, and altitude to those adjoining in which measurements were made, a fair estimate can be obtained of them all. Measurements of density were made, as far as possible, at points that can be located from year to year and where the snow was of an average depth. In all 74 density measurements were made, besides numerous soundings of depth with the graduated pole. At each density measurement the altitude was determined with an aneroid. Of these measurements 52 were in the forks on the south side, including Brighton Basin, 13 in the forks on the north side, and 9 in the upper portion of the main canyon. The average depth, density, etc., of the soundings of each locality are given in the accompanying table:

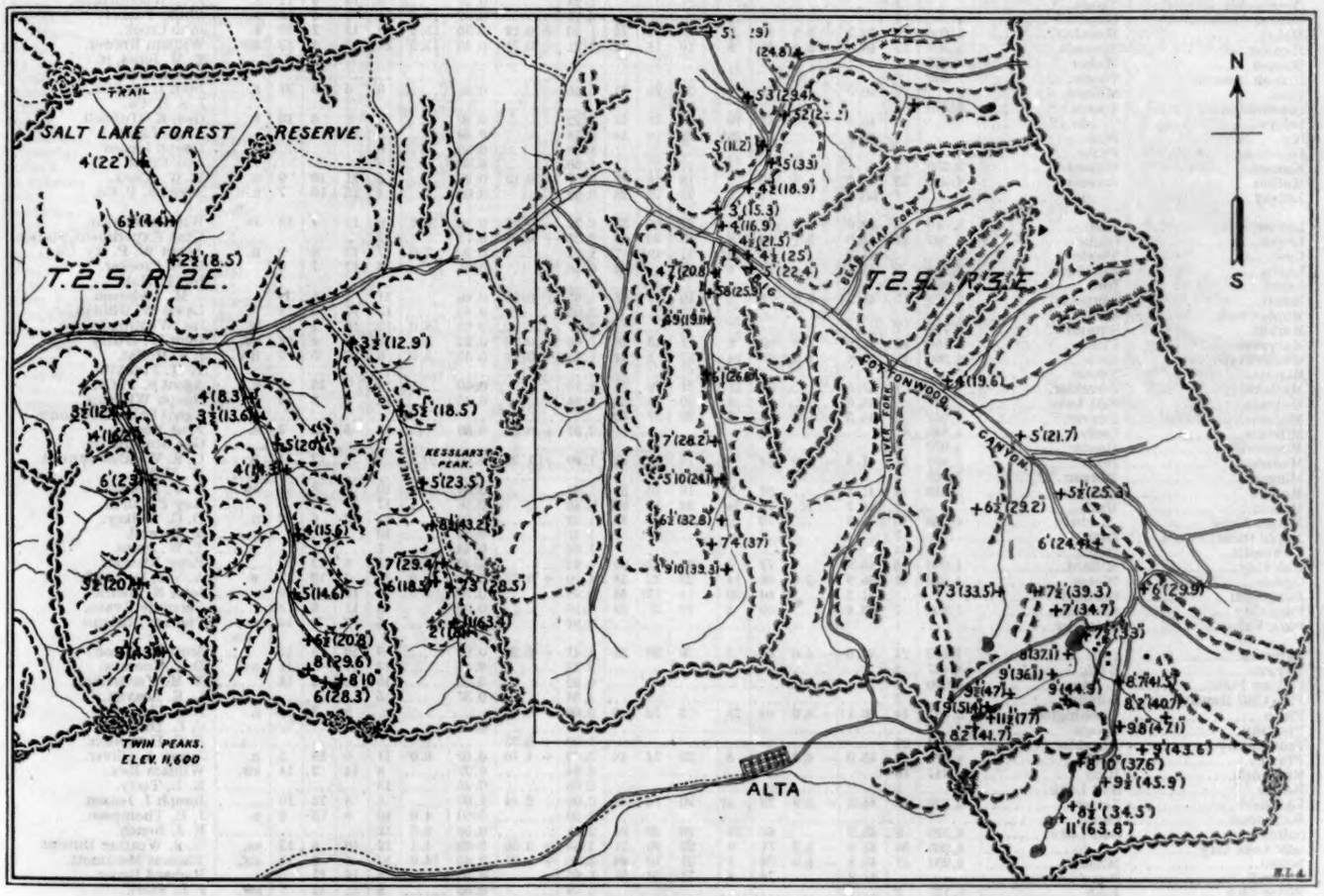
	Elevations.	Number of soundings.	Average depth.	Water equivalent.	Density.
			Ft. in.	*Inches.*	*Per cent.*
Mill B North Fork	6440–8150	3	4 4	24.8	48
Broads Fork	6300–8950	5	5 7	22.8	34
Mill B South Fork	6640–9050	8	4 10	19.0	33
Mineral Fork	6880–8530	9	6 2	27.4	37
Mill D Flat	7440	3	4 8	19.6	35
Mill D North Fork	7320–8600	10	4 9	22.6	40
Days Fork	7470–8940	9	6 7	28.5	36
Main Canyon (Willow)	8000–8750	6	6 4	30.0	42
Mill F South Fork	8280–8970	5	6 8	31.7	40
Brighton Basin	8700–9540	16	9 0	43.0	40
Total		74			
Average			5 11	26.9	38

The past winter and spring have been marked by rather unusual conditions in the matter of precipitation. In the early part of the winter the snowfall was comparatively light; but in February, March, and April, especially the last two months, a great deal of snow fell in this canyon. At the time of this reconnoissance the snow conditions were as follows: Along the north face of the main canyon, from the mouth up to Butler Fork, was practically bare; above Butler Fork the snow increased gradually in depth. Along the bottom of the canyon the first snow was encountered at Mill B North Fork. On the south side there were traces of snow below Broads Fork, with a gradual increase from there toward the head of the canyon. In Whipple Fork, Mill B North Fork, and Maxfield Gulch there was some snow, mostly in patches and irregular masses from drifting. In Mill D North Fork, Bear Trap, Willow Patch, and Mill F East Fork the snow lay pretty evenly distributed with comparatively little drifting and no slides. In all of the south forks the snow lay deeper in the bottoms than on the slopes. In many places much drifting and many snowslides have occurred, so that the snow layer was very solid and covered every natural feature. Where snowslides had occurred it was difficult and sometimes impossible to force the snow tube through the various frozen layers. Even the iron-pointed pole could scarcely be driven down. One measurement in a slide for a depth of 11½ feet gave a density of 56 per cent. From measurements, made roughly by the watchman of the Brighton Hotel, of the snowfall, it appeared that from October 1 last to April 23 approximately 47 feet had fallen. On April 23 the depth of the snow layer at the Brighton Hotel was 7½ feet with a density of 37 per cent.

Information obtained from various persons living in the canyon indicated that the depth of snow at the time of the survey was much greater than for years past. No means are at hand for a comparison of the density of the snow with that of past seasons. Generally speaking, the early snow furnishes the late summer supply. This would make it appear that the lateness of the main snowfall during the past season would, under ordinary conditions, produce high flood conditions. At the same time, because of the many snowslides which have resulted in packing and freezing the snow in extensive masses, it is probable that a considerable part of the run-off will be retarded until late in the season and thereby prove of the greatest benefit to the water users on the stream.



Typical view of condition in Cottonwood Canyon; average depth of snow, 6 feet 8 inches and water equivalent about 32 inches.



First figures indicate depth of snow in feet; second figures (in brackets) indicate water equivalent (in inches) of the snow.

TABLE 1.—*Climatological data for April, 1912. District No. 10, Great Basin.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Wyoming.																				
Border	Uinta	6,085	10	34.3	− 3.6	58	24	11	1†	39	0.75	− 0.29	0.22	.....	4	11	7	12	w.	S. W. Condron.
Cokeville	....do	6,204	2	34.4	.....	60a	28	9a	1†	43a	1.18	.....	0.47	8.0	7	24	1	5	nw.	E. J. Tuckett.
Evanston	....do	6,860	16	35.0	− 3.4	62	8	14	20	36	0.93	− 0.32	0.34	2.0	7	12	10	8	sw.	Frank Tucker.
Idaho.																				
Geneva	Bear Lake	.....	4	.....	.....	.....	.....	.....	.....	.....	1.24	.....	0.41	3.1	9	11	13	6	.....	F. W. Boehme.
Grace	Bannock	5,400	5	40.2	.....	68	10	20	7	41	1.43	.....	0.32	4.0	8	8	14	8	n.	Donald R. Shirk.
Paris	Bear Lake	5,946	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Norton.
Weston	Oneida	4,460	14	41.0	− 4.8	70	8	23	22	42	1.83	+ 0.33	0.40	2.0	8	13	2	15	sw.	Wm. T. Chatterton.
Utah.																				
Alpine	Utah	4,900	13	.....	.....	.....	.....	.....	.....	.....	3.27	+ 1.32	0.74	.....	9	9	5	16	.....	T. F. Carlisle.
Beaver	Beaver	6,000	8	42.0	.....	77	8	20	20	43	1.71	.....	0.47	5.0	7	8	10	12	sw.	E. D. Bacon.
Black Rock	Millard	4,872	8	43.0	.....	72	8	14	21	50	0.71	.....	0.25	3.0	4	12	3	15	s.	W. D. Livingston.
Burrville	Sevier	.....	1	37.4	.....	62	24	14	19†	42	1.00	.....	0.70	.....	5	.....	.....	.....	.....	F. R. Curtis.
Castle Rock	Summit	6,244	7	.....	.....	.....	.....	.....	.....	.....	1.43	.....	0.30	21.0	17	9	7	14	w.	David Moore.
Cedar City	Iron	5,750	7	43.8	.....	66	29	22	20	37	1.01	.....	0.30	.....	9	8	13	9	sw.	Parley Dalley.
Center	Tooele	.....	.....	41.8	.....	69	8	20	13†	42	1.28	.....	0.35	11.0	8	8	14	8	s.	L. C. Peterson.
Clarkston	Cache	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.57	.....	0.42	.....	11	8	4	18	.....	W. J. Griffiths.
Corinne	Boxelder	4,240	42	43.2	− 7.4	65	3†	26	20†	34	2.51	+ 1.42	0.55	8.0	7	11	8	11	.....	A. C. Murphy.
Deseret	Millard	4,541	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. W. Western.
Erekson	Tooele	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.50	.....	0.40	16.5	12	.....	.....	.....	.....	N. W. Erekson.
Enterprise	Washington	4,270	6	.....	.....	.....	.....	.....	.....	.....	1.81	.....	.....	3.0	6	9	14	7	s.	John Day.
Fairfield	Utah	4,866	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Harden Ashby.
Farmington	Davis	4,267	11	45.6	− 3.0	68	7†	25	15	37	3.00	+ 1.13	0.80	12.5	11	15	5	10	n.-sw.	Charles Boylin.
Fillmore	Millard	5,100	20	46.2	− 3.9	71	8	24	1	42	1.71	+ 0.04	0.60	.....	10	.....	.....	.....	.....	J. J. Starley.
Frisco	Beaver	7,318	16	41.6	− 5.4	65	7†	11	21	35	0.30	− 0.31	0.20	.....	2	.....	.....	.....	.....	Essen Nordberg.
Garrison	Millard	.....	9	38.8e	.....	66	29	11	13†	46	0.75	.....	0.75	.....	1	12e	3e	10e	n.	E. M. Smith.
Government Creek	Tooele	5,277	11	42.0	− 4.9	68	8	17	19	32	1.70	+ 0.39	0.42	8.0	8	7a	1a	21a	s.	Walter James.
Granger	Salt Lake	.....	.....	44.7e	.....	69	3†	18	19	35	2.78	.....	0.85	.....	9	.....	.....	.....	.....	Geo. E. Greene.
Grantsville	Tooele	.....	1	.....	.....	.....	.....	.....	.....	.....	1.24	.....	0.22	.....	9	14	4	12	s.	J. C. Woodmansee.
Grouse Creek	Boxelder	.....	4	.....	.....	.....	.....	.....	.....	.....	2.10	.....	0.67	18.9	11	9	6	15	s.	Philip Paskett.
Heber	Wasatch	5,606	19	39.9	− 4.5	65	7	18	22†	45	1.40	+ 0.12	0.30	15.0	9	13	7	10	s.	John Crook.
Henefer	Summit	5,301	12	40.8	− 3.1	68	8	16	14	42	2.21	+ 0.71	0.45	13.5	11	13	4	13	nw.	William Brewer.
Hooper	Weber	4,436	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. M. Jones, jr.
Ibapah (near)	Tooele	7,500	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. S. Lawton.
Ibex	Millard	.....	1	46.2	.....	72	7†	23	20	37	0.95	.....	0.33	.....	6	4	5	21	s.	John J. Watson.
International	Tooele	5,370	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	I. S. R. Co.
Iosepa	....do	.....	1	46.8	.....	81	10	24	21	43	2.22	.....	0.40	.....	9	8	6	16	s.	Geo. K. Hubbell.
Joy	Juab	.....	.....	45.8	.....	67	29†	22	19	34	0.78	.....	0.40	.....	3	.....	.....	.....	.....	A. M. Laird.
Junction	Piute	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.56	.....	0.39	.....	8	.....	.....	.....	.....	Joseph Jensen.
Kanosh	Millard	5,250	2	.....	.....	.....	.....	.....	.....	.....	1.50	.....	0.30	.....	9	.....	.....	.....	.....	Geo. Crane.
Kelton	Boxelder	4,230	32	43.6	− 5.4	70	8	18	15	37	0.57	− 0.13	0.20	.....	5	11	10	9	s.	F. W. Klock.
Lemay	....do	.....	1	50.6	.....	72	9	25	19	28	0.08	.....	0.03	.....	4	13	10	7	s.-e.-w.	Agent S. P. Co.
Levan	Juab	5,010	22	42.6	− 4.0	67	8	22	19	38	1.32	− 0.37	0.40	8.6	9	13	4	13	sw.	William Brown.
Logan	Cache	4,507	21	44.0	− 3.7	69	8	23	20	30	2.25	+ 0.66	0.73	.....	12	.....	.....	.....	.....	Utah Experiment Station.
Low	Tooele	.....	.....	47.2	.....	70	8†	27	19†	37	1.02	.....	0.20	2.0	7	13	8	9	n.	Agent W. P. Ry. Co.
Lucin	Boxelder	4,504	5	43.4	.....	72	8	24	1†	42	0.46	.....	0.31	.....	3	17	7	6	.....	R. G. Crocker.
Lund	Iron	5,086	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Job F. Hall.
Manti	Sanpete	5,575	17	43.2	− 3.6	71	7	19	19	43	1.65	+ 0.59	0.46	.....	11	5	1	24	.....	J. M. Anderson.
Maple Creek	Utah	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.05	.....	0.49	.....	13	11	6	13	.....	Lewis W. Gililan.
Marion	Summit	6,750	7	.....	.....	.....	.....	.....	.....	.....	2.27	.....	0.65	18.0	12	10	2	18	w.	Jas. Woolstenhulme.
Marysvale	Piute	6,180	12	41.2	− 3.9	69	8	17	13	48	1.06	+ 0.28	0.22	5.6	13	7	4	19	sw.	John W. Henry
Meadowville	Rich	6,200	11	36.8	− 4.3	60	24	17	1	34	1.14	− 0.74	0.55	3.0	6	16	5	9	nw.	J. S. Moffat.
Mercur	Tooele	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. H. Franklin.
Midlake	Boxelder	.....	1	47.5	.....	64	11	31	19	21	1.16	.....	0.40	.....	4	7	15	8	e.	Agent S. P. Co.
Midvale	Salt Lake	.....	.....	46.6	.....	74	8	20	19	38	2.34	.....	0.45	.....	12	8	8	14	s.	Joseph Williams.
Milford	Beaver	4,962	4	49.5	.....	78	5	20	27	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent Salt Lake Route.
Millville	Cache	4,848	17	.....	.....	.....	.....	.....	.....	.....	2.07	+ 0.37	0.59	.....	13	5	22	3	s.	Fred Yeates.
Minersville	Beaver	5,070	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Roberts, sr.
Modena	Iron	5,479	11	41.0	− 5.9	64	8	14	13	42	1.99	+ 1.20	0.60	10.4	9	6	13	11	w.	U. S. Weather Bureau.
Morgan	Morgan	5,068	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Vialck.
Moroni	Sanpete	5,519	4	41.3	.....	67	8	19	19	36	1.34	.....	0.34	12.6	10	6	6	18	sw.	B. F. Eliason.
Mosida	Utah	.....	.....	45.2	.....	76	24†	24	19	40	2.40	.....	0.56	.....	11	17	7	6	.....	Roy P. Curtis.
Mount Nebo	....do	4,650	10	45.3	.....	70	6†	23	21	35	1.32	.....	0.50	.....	11	12	6	12	n.	D. C. Walkey.
Nephi (near)	Juab	.....	7	.....	.....	.....	.....	.....	.....	.....	1.47	.....	0.58	.....	10	.....	.....	.....	.....	S. Boswell.
Newcastle	Iron	.....	1	.....	.....	.....	.....	.....	.....	.....	1.06	.....	0.43	.....	7	.....	.....	.....	.....	T. W. Jones.
Oak City	Millard	4,900	5	45.9	.....	72	9	25	12†	39	1.92	.....	0.40	8.5	11	8	12	10	.....	Peter Nielson.
Ogden	Weber	4,310	41	46.8	− 5.8	68	14	23	22	34	4.10	+ 2.72	0.69	7.0	17	3	10	17	w.	A. Van De Graff.
Panguitch	Garfield	.....	.....	37.2	.....	64	30	14	13†	45	0.95	.....	0.29	4.0	8	12	9	9	.....	John N. Henrie.
Park City	Summit	7,800	7	32.4	.....	59	8	10	21	32	0.19	.....	0.06	.....	8	11	6	13	.....	Gertrude Evans.
Park Valley	Boxelder	.....	1	.....	.....	.....	.....	.....	.....	.....	0.94	.....	0.31	.....	5	7	9	14	se., nw.	Thomas Stirland.
Parowan	Iron	5,970	21	42.6	− 4.6	66	7	20	20	33	1.41	+ 0.29	0.84	.....	9	10	8	12	.....	Scott Matheson.
Payson	Utah	4,637	8	.....	.....	.....	.....	.....	.....	.....	2.72	.....	0.35	.....	13	11	8	11	nw.	D. L. Coombs.
Pelican Point	....do	4,600	1	.....	.....	.....	.....	.....	.....	.....	0.99	.....	0.36	.....	10	16	3	11	.....	B. M. Mendenhall.
Pine Cliff Ranch	Summit	.....	1	.....	.....	.....	.....	.....	.....	.....	1.34	.....	0.37	.....	5	.....	.....	.....	.....	L. E. Leavitt.
Pinto	Washington	5,907	14	36.1f	− 8.0	63	23	3	13	46	0.80	− 0.20	.....	.....	.....	9g	3g	11g	s.	J. H. Harrison.
Plentiful	Tooele	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.00	.....	0.26	.....	6	.....	.....	.....	.....	C. L. Dunn.
Promontory	Boxelder	4,913	33	.....	.....	.....	.....	.....	.....	.....	1.00	+ 0.33	.....	.....	.....	.....	.....	.....	.....	F. C. Houghton.
Provo	Utah	4,532	23	45.0	− 4.9	74	8	22	14	48	2.40	+ 1.10	0.60	6.0	11	6	19	5	n.	James A. Oliver.
Randolph	Rich	6,442	10	.....	.....	.....	.....	.....	.....	.....	0.84	.....	0.27	.....	8	14	2	14	sw.	William Rex.
Revier	Salt Lake	.....	1	.....	.....	.....	.....	.....	.....	.....	2.08	.....	0.46	.....	13	.....	.....	.....	.....	E. L. Terry.
Richfield	Sevier	5,350	18	44.5	− 2.9	72	8†	20	14	46	3.00	+ 2.44	1.00	.....	5	8	12	10	.....	Joseph J. Jensen.
Richmond	Cache	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.30	.....	0.60	4.0	16	6	15	9	s.	J. R. Thompson.
Saltair	Salt Lake	4,220	8	46.2	.....	66	29	29	20	24	2.11	.....	0.58	6.5	12	.....	.....	.....	.....	E. J. Bench.
Salt Lake City	....do	4,360	38	46.8	− 3.3	71	9	27	20	31	2.34	+ 0.08	0.63	4.1	12	10	5	15	se.	U. S. Weather Bureau.
Scipio	Millard	5,260	17	42.8	− 4.0	70	7	21	10	48	3.26	+ 1.97	0.85	14.0	13	6	9	15	sw.	Thomas Memmott.
Showell	Boxelder	.....	.....	41.2	.....	74	8	13	20	51	1.65	.....	0.36	.....	5	14	11	5	.....	Richard Ilgner.
Silver City	Juab	6,127	2	.....	.....	.....	.....	.....	.....	.....	1.19	.....	0.55	.....	8	11	12	7	sw.	J. L. Stark.

TABLE 1.—*Climatological data for April, 1912. District No. 10*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Utah—Continued.																				
Spanish Fork	Utah	4,585	2	45.9	.....	73	9	19	19	39	2.82	.....	0.55	.....	14	12	5	13	.....	W. P. Shippee.
Strawberry Tunnel (west).	....do	7,650	6	34.6	.....	59	9†	7	19	38	2.45	.....	0.50	32.5	10	12	3	15	.....	F. W. Cater.
Thistle	....do	5,075	18	41.3	− 6.7	72	8	18	19†	51	1.96	+ 0.89	0.38	.....	8	.....	.....	.....	w.	John Thorgierson.
Tooele	Tooele	4,900	16	44.3	− 4.7	69	7	23	20	37	2.27	+ 0.60	0.53	.....	13	4	8	18	ne.	E. A. Bonelli.
Utah Lake Pumping Station.	Utah	4,500	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. A. Knight.
Vernon	Tooele	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.00	.....	0.43	11.0	14	7	8	15	sw.	Glynn Bennion.
Wendover	....do	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. S. Cooper.
Whisky Creek	Millard	.....	1	.....	.....	.....	.....	.....	.....	.....	1.32	.....	1.00	1.8	3	.....	.....	.....	.....	Geo. Stevens.
Winder	Garfield	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.80	.....	1.00	16.0	3	.....	.....	.....	.....	E. H. Mangum.
Woodruff	Rich	6,500	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Sidney Pussey.
Oregon.																				
Burns	Harney	4,157	21	42.8	− 0.6	72	8	22	17†	38	1.97	+ 1.42	0.61	13.0	13	6	9	15	sw.	J. C. Welcome, jr.
Cliff	Lake	4,300	5	38.5	.....	71	9	11	5†	54	1.39	.....	0.31	4.0	11	3	9	18	sw.	John C. Green.
Paisley	....do	4,500	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. C. Woodward.
Silver Lake	....do	4,700	15	40.4	− 2.4	72	9	15	14	50	1.34	+ 0.56	0.55	3.0	8	9	10	11	sw.	Geo. W. Marvin.
California.																				
Tahoe	Placer	6,240	2	32.4	.....	53	3	13	12	32	2.28	.....	1.40	22.0	6	7	3	20	w.	R. M. Watson.
Truckee	Nevada	5,819	41	32.8	− 1.8	62	8	16	12†	38	1.80	− 0.19	0.40	18.0	10	0	30	0	se.	Southern Pacific Co.
Nevada.																				
Austin	Lander	6,594	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. O. Booe.
Battle Mountain	....do	4,843	41	47.7	− 2.1	74	7†	24	12†	46	2.90	+ 2.14	1.30	17.5	9	10	9	11	w.	Southern Pacific Co.
Beowawe	....do	4,905	41	39.8	− 9.5	69	5	18	10	45	0.95	+ 0.28	0.34	7.5	4	13	9	8	w.	Do.
Carlin	Elko	5,232	41	43.2	− 0.5	74	8	20	1	48	0.06	− 0.52	0.02	0.6	4	20	0	10	.....	Do.
Carson Dam	Churchill	4,032	5	46.1[c]	.....	73[c]	4	22[c]	22	41[c]	0.15	.....	0.15	T.	1	.....	.....	.....	w.	U. S. Reclamation Service.
Cherry Creek	White Pine	6,450	4	40.8	.....	66	2†	20	1	45	1.28	.....	0.25	8.0	14	7	13	10	w.	J. H. Leishman.
Clover Valley	Elko	6,000	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	I. F. Wiseman.
Columbia	Esmeralda	5,750	5	44.6	.....	70	2	19	20	39	0.67	.....	0.45	2.0	5	15	8	7	se.	A. Booth.
Dry Farm	Elko	.....	0	41.2	.....	72	8†	13	11	40	3.45	.....	0.68	.....	14	.....	.....	.....	.....	Walfried Sohlman.
Elko	....do	5,432	1	41.1	− 3.6	69	7	21	13†	40	.....	.....	.....	.....	.....	11	10	9	w.	E. J. Clark.
Ely	White Pine	6,421	21	40.2[f]	− 2.0	65[f]	8	15[f]	12	40[f]	0.48	− 0.76	0.35	5.0	3	.....	.....	.....	n.	R. F. Mathias.
Eureka	Eureka	6,500	9	38.6	.....	64	7	14	19	40	2.33	.....	0.50	5.0	13	5	8	17	s.	Clay Simms.
Fallon	Churchill	3,965	7	47.3	.....	76	7	22	13†	46	0.87	.....	0.20	T.	9	16	5	9	nw.	U. S. Experiment Station.
Fernley	Lyon	4,200	39	47.0	− 3.4	74	2†	20	22	47	0.36	− 0.02	0.13	T.	3	9	17	4	w.	Mrs. G. A. Steele.
Geyser	Lincoln	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. J. F. Wambolt.
Glenbrook	Douglas	.....	3	35.4	.....	54	9	16	24	30	2.35	.....	1.00	12.0	6	9	21	0	w.	C. C. Henningsen.
Golconda	Humboldt	4,697	33	46.0	− 2.0	72	7	24	22	47	0.89	+ 0.33	0.40	.....	4	5	15	10	w.	Southern Pacific Co.
Halleck	Elko	5,631	19	40.4	− 3.1	69	7†	18	13	44	1.31	+ 0.54	0.50	8.0	6	6	17	7	w.	Do.
Hawthorne	Mineral	4,369	18	48.3	− 2.9	74	7	24	20	39	0.35	+ 0.11	0.08	0	9	8	17	5	sw.	G. B. Stannard.
Jean	Clark	2,074	4	51.0	.....	79	8†	24	20	49	0.27	.....	0.20	T.	4	20	6	4	nw.	Salt Lake Route.
Lahontan	Churchill	.....	0	49.3	.....	75	7	25	12	35	0.21	.....	0.09	0	4	14	11	5	w	U. S. Reclamation Service.
Lewer's Ranch	Washoe	5,500	24	42.9	− 3.1	72	1	17	12	45	1.60	+ 0.19	.....	3.0	7	3	12	15	.....	Ross Lewers.
Lovelocks	Humboldt	3,977	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. P. Tilford.
Millett	Nye	.....	4	41.4	.....	68	6†	11	12	50	0.59	.....	0.45	0	2	6	13	11	s.	Fred J. Jones.
Mina	Mineral	4,600	5	48.5	.....	74	5	20	18	32	.....	.....	.....	.....	.....	18	3	9	n.	Southern Pacific Co.
Potts	Nye	6,990	19	37.4	− 7.1	61	28†	11	12	39	1.30	+ 0.55	0.40	9.0	4	4	0	26	n.	Miss Mamie Potts.
Quinn River Ranch	Humboldt	4,850	10	44.2	− 2.4	75	8	20	6†	53	0.14	− 0.26	0.08	0	2	6	5	19	w.	F. M. Payne.
Rebel Creek	....do	.....	0	43.0	.....	72	2†	18	6	48	1.65	.....	1.00	10.0	14	9	5	16	sw.	E. J. Hyatt.
Reno	Washoe	4,532	41	44.0	− 3.3	71	6	23	22	42	0.49	− 0.12	0.27	T.	7	7	9	14	w.	U. S. Weather Bureau.
Soda Lake	Churchill	5,434	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Reclamation Service.
Tecoma	Elko	4,812	34	40.8	− 6.3	65	3†	18	11†	32	0.04	− 0.59	0.02	0.4	3	13	11	6	e.	Southern Pacific Co.
Tonopah	Nye	6,090	7	41.6	.....	64	30	20	12	29	0.58	.....	0.22	3.0	4	5	19	6	se.	U. S. Weather Bureau.
Wells	Elko	5,631	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Southern Pacific Co.
Winnemucca	Humboldt	4,432	33	44.0	− 3.1	72	7	20	22	44	0.70	− 0.18	0.39	9.6	7	7	3	20	sw.	U. S. Weather Bureau.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 10, Great Basin.*

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Wyoming.																																
Border	Bear					.14								T.					.18	.22		.21	T.		T.							0.75
Cokeville	do					.17					.13		.05	T.					.05	.11		.20				T.					47	1.18
Evanston	do					.09					T.		.08	.09			T.		.05	T.			T.		.19	.09	T.				34	0.93
Idaho.																																
Geneva	Bear					.12				.10	.03	.06	.02	.01								.41								.14	.29	1.24
Grace	do				.25						.01						.30		.32	.10		.10	.05								.30	1.43
Paris	do																															
Weston	do										.14	.21	.21						.37	.24		.16	.10								.40	1.83
Utah.																																
Alpine	G. S. Lake					.25					.54	.74	.19						.24	.44	.13		.51			.23						3.27
Beaver	Sevier Lake										.28	.47	.31	.05			.29	.01	T.	T.	T.	.30				T.	T.	T.				1.71
Black Rock	do										T.	.21	T.				.17		T.			.25					T.	.08			0.71
Burrville	do									.30		.20	.10						.30									.70			1.60
Castle Rock	G. S. Lake				.02	.12					.05		.05	.10				.05	.03	.30	.05	.05	.30		.10	.05	.03		.02	.03	.08	1.43
Cedar City	Desert										.20	.30	.04	.05		.01	.16	T.			T.	.01				*	.16	.08				1.01
Center	do					.12					T.	.15	.06	T.		.03			.04	.35	T.	T.	.33		T.	T.	T.	.20			T.	1.28
Clarkston	G. S. Lake				.42					.35		.40	.10	.10				.15		.40		.13	.10		.15					.27	2.57
Corinne	do					.55					.35	.38	.31						.42	.30					.20							2.51
Deseret	Sevier Lake																															
Erekson	Desert					.18				.40	.02	.29	.23	.06					.25		.30		.35			.04	.34			.04		2.50
Enterprise	G. S. Lake					.03				*	*	*	1.70					T.									.08					1.81
Fairfield	do																															
Farmington	do				T.	.10						.30	.25	.10					.75	.80	.20	.10	.05			.05				.30		3.00
Fillmore	Sevier Lake											.60	.20	.06			.10	.01	.15	.01		T.	T.		T.	.37	.01	.20				1.71
Frisco	Desert												.10									.20										0.30
Garrison	do							T.	T.	T.							T.	T.	T.							T.		.75				0.75
Government Creek	do					.17						.33								.27	.17		.42			.05		.22		.07		1.70
Granger	do					.11					T.	.42		.25					.30	.50	.05	.85		T.	.10						.20	2.78
Grantsville	G. S. Lake					.19						.20							.22	.10		.03	.20					.10	.10			.10	1.24
Grouse Creek	Desert				.14	.21					.20	.23	.38	.19				T.	.02	.67	.02	T.	.02		.02							2.10
Heber	G. S. Lake					T.					.10		.30	.20					.18	.22	T.		.08			.15		.12			.05	1.40
Henefer	do				.30						.20	T.	.25	.45					.09	.12	.02		.22		.11	.30		T.		T.	.15	2.21
Hooper	do																															
Ibapah (near)	Desert																															
Ibex	do												12				23		.04			.03				.20	.33					0.95
International	G. S. Lake																															
Iosepa	Desert					.38			T.		.18	.35	T.						.15	.20	T.		.40			.20		.26			.10	2.22
Joy	do											.35		T.						.03	T.	T.	T.	T.	T.	T.	T.	.40				0.78
Junction	Sevier Lake					T.					.10	.39	.04	.32				.17	.17	T.							.06	.31				1.56
Kanosh	do											.30	.19				.05		.24	.19						.26	.04	.13	.10			1.50
Kelton	G. S. Lake					.07					T.	.05	.20							.15											.10	0.57
Lemay	Desert					.02					T.		.02							.03	.01											0.08
Levan	Sevier Lake					T.					.15	.25	.40				.11		.21	.11	.01		.05		.03							1.32
Logan	G. S. Lake				.73					.15	.03	.22	.09			.01		.11	.30			.01			.14	.06				.40		2.25
Low	do					.20						T.	.20						.15	.05	.20		.02		T.						.20	1.02
Lucin	Desert				T.	.06					T.	.31								.09										T.		0.46
Lund	do																															
Manti	Sevier Lake										.13	.10	.46	.15			.20		.20	.18	.03	T.	.07			.09		.04				1.65
Maple Creek	G. S. Lake					.07					.29	.08	.47	.24			T.	.04	.19	.39	.26	.03	.19			.43					.07	3.05
Marion	do				T.	.09					.12	.03	.39	.10			T.		.22	.28	.05	.06	.10		T.	.65	T.	T.			.18	2.27
Marysvale	Sevier Lake					.01					.10	.18	.05	.22			.09	.01	.10	.03	T.	.02	.01			.02	T.	.22				1.66
Meadowville	G. S. Lake					.25					T.	T.	.05	.05			T.			.09		T.	T.			.15			T.	.55		1.14
Mercur	do																															
Midlake	do											.23	.25						.40	.28												1.16
Midvale	do				.20					.14		.36	.32					.14	.45	.12		.43	.02		.07		.01			.08		2.34
Milford	Sevier Lake																															
Millville	G. S. Lake					.59					.12	.06	.13	.03			.01		.15	.25		.01	.01		.06	.12					.53	2.07
Minersville	Sevier Lake																															
Modena	Desert									.16	.21	.44	.53				.05	.19	T.		T.					.02	.26	.13				1.99
Morgan	G. S. Lake																															
Moroni	Sevier Lake				T.	T.					.09	.16	.30	.34		T.	T.	T.	.10	.14	T.	T.	.09		.06	.02	T.	T.			.04	1.34
Mosida	G. S. Lake					.10						.23	.28						.55	.56	.32	.12	.10			.08					.03	2.40
Mount Nebo	do					.03						.26	.50				.04		.15	.13	.04	.01	.07		.08		.01					1.32
Nephi (near)	do											.26		.58		.03		.08		.22			.10	.07		.06	.03	.04				1.47
Newcastle	Desert									T.	.43	.23	.18				.10	.05									.03	.04				1.06
Oak City	Sevier Lake										.18	.33	.40	.28					.21	.03			.08		.04	.17	.15	.05				1.92
Ogden	G. S. Lake			.09	.23	.14	.17	.08				.32	.69	.42				.12	.08	.45	.63	.04	.07	T.			.12	.09	T.	.36		4.10
Panguitch	Desert										.15	.29	.05			.06	.11		.09							.11	.09					0.95
Park City	G. S. Lake				.01						.01	.02	.01						.06	.03	.01	.04										0.19
Park Valley	Desert					.19						.31	.20			T.			T.	.21	.03											0.94
Parowan	do	.03										.84	.03				.16	.03		.03		.06			.21		.02					1.41
Payson	G. S. Lake					.06					.16	.27	.35	.15			.06		.23	.30	.11	.16	.30				.55		T.			.02	2.72
Pelican Point	do					.02					.03	.15	.01						.36	.15	.10	.05	.10		.02							0.99
Pine Cliff Ranch	do							37											.23						.19	.30			.25			1.34
Pinto	Desert												.43	.05				.12			T.							.20				0.80
Plentiful	G. S. Lake					.20							.26					.12			.10				.20				.12			1.00
Promontory	do																															‡1.00
Provo	do					.15					.25	.60	.05	.25					.40	.30	.05	.05	.20		T.						.10	2.40
Randolph	do					.03					.02	T.	.15						T.	.08	T.	.03	.02		.24					T.	.27	0.84
Revier	do					.24				.05			.20	.16			.04	.10	.17	.20		.20	.46			.08	.08			.10		2.08
Richfield	Sevier Lake											1.00	.40						.20							T.	.50	.90				3.00
Richmond	G. S. Lake				.60	.03				.45	.08	.30	.08	.05		T.		.26	.60	.30		.06	.05		.10	.01				.30	.03	3.30
Saltair	do					.25					.04	.26	.09						.40	.21	.08	.01	.58		.03	.04					.12	2.11
Salt Lake City	do					.17					.19	.33	.14	.01			T.		.63	.14	T.	.06	.30		.02	.19	T.			.16	T.	2.34
Scipio	Desert	.05									.15	.45	.85	.37	.22	.45		T.	.15	.08		.03	.07		T.	.20	T.	.19				3.26
Showell	do					.30					.36	.34	.31							.34												1.65
Silver City	do										.55	.26	.02				.01	.02	.02	.24											.07	1.19
Spanish Fork	G. S. Lake	T.				.06	T.				.33	.11	.26	.22				.12	.19	.41	.15	.06	.29		.04	.55	T.			.03		2.82
Strawberry Tunnel (West).	do					.07					.41	.05	.48	.50					.09	.32		.07	.09			.37						2.45
Thistle	do										.35	T.	.38	.18			T.		.10	.10	T.	T.	.25		.30	.30						1.96
Tooele	do					.25					.11	.38	.11	T.			.03		.12	T.	.42	.01	.53		.03	.10	T.	.03	T.		.15	2.27
Utah L. Pumpg. Sta.	do																															
Vernon	Desert					.21					.22	.30	.02	.03				.02	.28	.16	.04	.06	.20			.03	.23	.20				2.00
Wendover	do																															
Whisky Creek	do													.12												.20		1.00				1.32
Winder	Sevier Lake							T.							.60							T.	.20				1.00				1.80
Woodruff	G. S. Lake																															

TABLE 2.—*Daily precipitation for April, 1912. District No. 10*—Continued.

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Oregon.																																
Ana River	S. E. drainage										.02	.12		T.			T.		.01	T.	.01	T.			.16		.18			.30	.02	0.83
Bear Valley	do											T.	.31	.62					.49		.09	T.			.04					.10	.02	1.67
Burns	do										.40			.61			.05	.21		.06	.05			.02	.03	.02	.12	.12		.16	.12	1.97
Burns Mill	do																															
Christmas Lake	do				T.						.06	.02	T.	T.	.04				.03		T.	.08		T.	.28	T.	.10		.20	.33	.02	1.16
Cliff	do										.14	.07		.04	.12		T.		.09		.03				.31		.07		.10	.30	.12	1.39
Diamond	do																															
Embody	do										.05	.17							.06		.02	.12		.08	.26	.12				.07	.84	1.79
Fort Rock	do										.14	.03							.15						.33	.04					.65	1.34
Paisley	do											T.		T.																.89	.41	1.30
Seneca	do				T.						.56		.10		.26	.07	T.	T.	.10	.10	.08	T.			.20					.60	.10	2.17
Silver Lake	do										.10			.04							.20	T.	.05		.55		.18			.01	.21	1.34
Valley Falls	do									.14	.03	T.		.02		.08		.02	.06		T.	.20			.08	T.	.20			.24		1.07
California.																																
Bijou	Truckee								T.	.08	.12	.20									.04				.54	.10	T.		T.	.41	.04	1.53
Boca	do										.04										.10	.10				.50			.20	.60		1.54
Deer Park	do									*	.54	.33	.28									.56				1.50	.31		*	*	3.80	7.32
Glen Alpine	do									.21	1.00	.50	.10		.10	.10		.10	.12		.52	.05			.60	.40				1.60		5.40
Hobart Mills	do			T.						*	.07	.02					.01	.01	T.	.09	.08	T.		*	.22	.20			*	.70	.08	1.48
Lundy	East Walker									.12	.35				.15			.10							.14		T.			.10		0.96
McKinney	Truckee									*	.35	.30								.12	.32				.14	.52	.12			1.73	.36	3.96
Markleeville	East Carson									.02	.20	.52						.02	T.	T.					.10	.24				.46		1.56
Shields Ranch	East Walker				T.					T.	.07					.03		.05							.25	.10		.03		.04		0.57
Silver Creek	East Carson									.06	.30	.60						.05	.05	.05					.20	.21				.65		2.17
Tahoe	Truckee									T.	.22	T.	T.		T.	T.	T.	T.	T.	T.	.08	T.	T.	T.	T.	.50	.08		*	1.40		2.28
Tallac	do									T.	.50	.50	T.					T.	T.	T.	T.				.25	.25	T.			.50	T.	2.00
Truckee	do		T.				.10			.10		.20						.30		.10		.10		.10		.40		.20		.20		1.80
Woodfords	West Carson										*	.14													.20				*	.12	.22	0.68
Nevada.																																
Arthur	Humboldt				.02					.11	.40	.60	1.30			T.			1.10	.90	.20	.10	.20		.01	T.	.04		T.	.20		5.28
Austin	Reese																															
Battle Mountain	Humboldt				.25						.20	1.10						.10	T.	.50		.15	T.			.10	.25	.25					2.90
Beowawe	do										.34	.19	.22							.20		T.	T.									0.95
Bishop	do				.80					.24		.10	1.38		.07				.05	.95	.95		.11		.46					.03		5.14
Carlin	do				T.					T.	T.			T.						.02		.01	.02		.01	T.						0.06
Carson Dam	Carson					T.	T.				.15		T.				T.	T.	T.								T.					0.15
Cherry Creek	Humboldt				.03	.07					.14	.07		T.		.25		.08	.09	.06	.07	.06	.22		.05	.04	.05					1.28
Clover Valley	do																															
Columbia	Desert								T.	.45	.05	.13	.03								T.						.01					0.67
Dry Farm	Humboldt				.29	.30					.27	.09	.59			.10		.25	.15	.13	.45	.16	.10		.54	.03						3.45
Elko	do																															
Ely	do										.06	.35	T.						.07		T.											0.48
Eureka	do				.02	.50				.20	.30	.48				.15		.05	.02	.03		.04			.21	.15	.18					2.33
Fallon	Carson				T.	.02				T.	.16	.06	.01			.10	.08	.09									●	.15				0.87
Fernley	Truckee				T.						T.	.13					.13		T.						T.		.10					0.36
Geyser	Humboldt																															
Glenbrook	Truckee				T.					.25	T.	.20	T.					T.	.30	.30					T.	.40				1.00		2.35
Golconda	Humboldt										.08							.15				.26				.40						0.89
Halleck	do				.50					.20	T.	.13	T.		.05			.08	T.	.01	T.	T.		.35	T.							1.31
Hawthorne	Desert					.07				.02	.02					.08		.05	.03		.03						.04	.01				0.35
Jean	do				T.					.05	.10	.10	.02																			0.27
Lahontan	Carson										T.	T.					.04								T.	.09	.05			.03		0.21
Lewers Ranch	Truckee										T.	T.	T.	T.							.25	*	.25	*	*	.30				.80		1.60
Lovelocks	Humboldt																															
Massacre Lakes	Desert							.07			.10	.04	T.	T.	.17			T.	.05	.02	T.	.18	T.		.06		.12			T.	.04	0.85
Mill City	Humboldt									*	.10	.10										.05										0.25
Millett	Reese									.14									T.								.45					0.59
Mina	Desert																															
North Fork	Humboldt				.10					*	.30	.20	.20	.10					T.	T.			*	.10	.10	.13		.10		T.	.10		1.43
Potts	Reese					.20				.05	T.	.40	.30			.15	.05	T.	T.						T.		.15					1.30
Quinn River Ranch	Humboldt										.06	.08			T.										T.							0.14
Rebel Creek	do				T.	.02					1.00	.02			T.		T.	.05	.05		.04	.02	.10		.06	.02	.20		.05	.01	.01	1.65
Reno	Truckee				T.					.04	T.	.01			.05	T.	T.	T.	.01	T.	T.	T.			.10		.01			.27		0.49
Skelton	Humboldt				.33					.13		.10	.30					.47	.14		.35		.40		.37					.10		2.69
Smith	West Walker				.09					T.	.03				.13			.04		.02	.02				.08	.08	.05	T.		T.		0.54
Soda Lake	Carson																															
Spooners Ranch	Truckee				T.					T.	T.	.09	T	T.	T.	T.		T.	T.	T.	.05	T.	T.	T.	.30					*	.30	0.74
Sweetwater	East Walker																															
Tecoma	Humboldt				T.					T.	T.	T.	.01			T.			.01	.02	T.			T.						T.		0.04
Tonopah	Desert					.20				.22	T.	.14															.02					0.58
Wells	Humboldt																															
Willow Point	Little Humboldt.																				.04	.07					.06				.05	0.22
Winnemucca	Humboldt				.04					T.	.39				T.		.05	T.	.04		T.	.02			.05		.11		T.	T.		0.70

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures for April, 1912. District No. 10, Great Basin.*

Date.	Wyoming.				Weston, Idaho.		Utah.																	
	Border.		Evanston.				Corinne.		Government Creek.		Joy.		Marysvale.		Meadowville.		Modena.		Ogden.		Parowan.		Provo.		Salt Lake City.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	50	11	42	19	57	24	57	27	53	22	64	30	54	25	41	17	57	27	62	39	54	28	57	25	54	34
2	48	11	49	22	62	27	61	29	54	32	60	30	63	20	42	20	61	26	63	42	59	27	66	26	65	38
3	50	11	50	23	65	29	65	33	52	34	61	56	62	29	50	21	59	27	58	37	60	33	71	29	67	44
4	53	20	50	27	62	34	61	48	60	46	60	50	62	37	54	27	58	33	56	34	60	44	69	39	61	50
5	43	32	42	31	53	27	56	37	55	34	60	37	57	37	50	32	58	38	60	38	56	35	56	30	54	39
6	43	17	45	23	54	25	53	28	54	28	56	30	53	28	43	22	61	31	64	40	60	34	61	25	56	36
7	49	12	56	21	65	24	55	29	64	32	66	32	68	20	44	21	64	25	65	39	66	33	73	25	70	39
8	48	15	62	26	70	28	60	35	68	37	66	44	69	25	50	27	64	31	60	36	65	35	74	29	68	47
9	53	18	61	27	68	29	64	30	66	34	64	44	65	26	53	34	60	31	61	38	63	35	71	35	71	46
10	32	28	55	29	55	33	63	36	58	31	64	32	49	27	50	32	42	30	58	34	48	25	61	32	59	36
11	51	18	49	25	56	33	57	32	50	32	44	34	49	25	45	23	39	29	56	32	42	32	60	35	59	36
12	46	31	45	27	48	32	49	32	41	28	48	28	42	25	48	31	33	19	54	29	38	24	42	31	46	33
13	37	26	35	23	43	33	44	34	46	29	57	28	45	17	44	26	45	14	60	31	49	27	46	31	44	32
14	42	26	43	18	52	25	50	36	52	25	56	26	52	26	44	28	48	26	68	36	42	25	57	22	51	32
15	49	17	51	19	57	24	57	27	53	27	65	27	56	22	47	21	52	30	66	35	51	26	63	23	58	35
16	48	24	49	24	47	24	57	32	50	30	60	40	52	20	47	28	52	31	64	30	53	29	58	30	53	39
17	49	18	50	21	45	25	57	30	57	22	53	26	57	25	49	22	48	27	59	28	53	28	64	23	57	36
18	46	20	45	22	47	28	50	32	50	30	52	30	56	32	50	25	53	30	58	29	55	31	52	32	50	32
19	42	20	36	15	39	26	48	29	38	17	43	22	44	20	43	21	41	21	53	27	49	22	56	27	40	29
20	41	15	37	14	43	25	47	26	40	24	50	29	45	19	40	18	46	20	55	29	48	20	48	27	44	27
21	35	25	38	22	37	30	45	26	45	24	50	29	48	20	44	28	51	20	51	24	49	24	53	28	43	31
22	43	15	39	17	44	23	47	29	45	29	52	28	54	24	54	20	52	30	54	23	53	26	46	29	48	32
23	52	23	52	17	54	24	44	26	51	27	60	27	65	19	54	20	64	22	58	28	65	26	64	23	60	33
24	58	26	55	27	60	32	59	29	61	40	60	40	65	30	60	27	62	28	60	32	62	44	65	34	65	44
25	44	31	42	27	48	33	48	36	49	32	55	31	52	30	45	30	55	32	57	34	49	32	50	35	52	35
26	51	21	49	16	53	25	55	30	54	27	50	30	53	27	51	22	52	28	56	34	50	29	62	25	60	36
27	54	24	54	25	62	27	60	36	51	34	53	31	50	32	53	24	54	32	62	39	49	34	62	38	58	42
28	55	23	53	24	55	26	58	30	60	32	60	38	63	23	58	25	59	30	66	40	62	29	66	26	61	40
29	46	28	52	32	64	38	55	29	63	40	67	47	65	45	58	25	64	44	65	38	65	42	68	45	64	39
30	47	27	45	22	52	33	65	33	61	31	67	53	65	35	47	32	64	34	64	38	63	38	65	35	59	41
Mns.	47.5	21.1	47.7	22.2	53.9	28.2	54.9	31.5	53.6	30.3	57.4	34.3	56.0	26.3	48.6	25.1	53.9	28.2	59.8	33.8	54.6	30.6	60.2	29.8	56.6	37.1

Date.	Burns, Oreg.		Nevada.																							
			Cherry Creek.		Elko.		Eureka.		Fallon.		Jean.		Lahontan.		Millett.		Mina.		Quinn River Ranch.		Reno.		Tecoma.		Tonopah.		Winnemucca.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	64	26	65	20	61	23	57	17	69	27	73	30	73	39	63	15	64	45	70	24	70	28	60	35	60	36	68	25
2	68	24	66	28	66	23	60	30	74	29	74	30	73	48	66	17	68	45	74	21	67	34	61	35	61	40	70	27
3	66	28	61	35	66	34	60	34	73	41	75	41	71	46	65	42	66	48	68	31	63	38	65	35	58	41	67	38
4	70	26	51	34	61	33	52	38	67	45	66	44	54	38	57	38	70	49	60	41	52	43	57	33	54	35	53	41
5	68	30	53	33	44	36	48	30	61	31	70	30	65	35	56	34	74	50	61	29	61	35	53	34	51	31	59	33
6	68	20	55	23	62	23	60	25	71	27	74	28	74	39	68	20	70	54	71	20	71	29	60	39	61	38	67	23
7	69	34	63	26	69	29	64	35	76	33	75	29	75	35	68	28	65	40	72	30	64	35	65	40	62	41	72	29
8	72	36	66	31	68	29	50	34	73	35	79	30	71	43	66	33	62	42	75	29	68	37	65	38	58	42	70	34
9	56	32	64	32	65	28	57	33	69	36	69	33	64	41	55	30	60	40	70	30	60	41	65	33	48	28	66	40
10	50	24	47	27	60	33	37	25	55	38	59	28	51	28	43	30	58	36	58	31	50	30	55	33	36	26	45	32
11	56	34	45	28	42	32	37	25	45	28	58	25	45	27	40	27	50	32	49	29	41	24	45	18	35	24	45	30
12	68	30	41	23	41	28	35	20	52	25	56	26	53	25	40	11	48	30	49	29	45	26	36	18	37	20	48	30
13	64	29	44	26	41	21	40	17	54	22	61	26	60	31	48	17	50	42	51	25	50	26	45	18	42	25	48	24
14	60	27	52	22	50	21	50	24	61	24	68	26	63	36	55	20	52	41	52	29	57	33	49	20	45	29	53	28
15	54	30	54	27	53	31	49	25	60	35	69	26	60	37	55	23	55	43	61	20	57	34	47	25	49	32	59	28
16	52	32	52	25	55	21	51	27	60	34	72	31	61	40	58	22	64	28	62	20	54	36	52	28	53	36	58	28
17	42	22	51	26	51	27	47	20	60	36	73	36	65	40	52	27	51	27	57	28	58	37	52	35	51	32	57	34
18	46	28	51	25	46	27	43	27	56	36	72	35	53	30	51	22	51	20	50	24	45	29	45	20	56	27	40	29
19	45	32	38	22	33	24	34	14	48	27	69	30	51	26	40	22	50	35	47	26	43	26	32	19	35	22	45	24
20	45	25	41	25	37	27	38	23	49	22	60	24	52	29	45	28	60	38	47	30	46	25	37	18	41	23	46	30
21	44	26	45	23	41	24	45	20	55	24	68	31	55	26	53	28	60	38	50	22	46	28	42	19	54	27	47	26
22	49	28	45	24	46	28	50	17	59	22	72	29	66	33	56	21	54	21	55	20	56	23	43	23	53	28	54	20
23	52	29	62	25	64	25	63	26	72	26	78	35	73	42	67	17	69	48	65	26	63	36	59	30	61	38	64	28
24	54	27	58	37	58	35	55	32	71	43	72	34	61	32	60	37	60	44	57	37	50	33	47	30	52	28	55	36
25	50	33	48	30	48	33	47	25	60	29	74	36	63	32	57	30	56	42	52	31	53	30	45	35	50	25	56	35
26	56	22	45	31	51	31	44	31	59	34	68	35	55	36	48	33	42	35	59	36	50	33	42	35	43	32	51	34
27	63	26	55	30	56	29	57	30	63	34	72	33	69	45	60	25	52	38	63	24	65	30	52	36	55	30	61	28
28	60	28	65	29	60	32	62	34	68	46	78	34	69	40	63	34	58	38	62	42	62	42	59	37	58	42	61	43
29	62	24	61	43	56	36	61	38	62	43	79	34	60	37	64	41	60	30	58	43	48	34	55	36	63	40	59	41
30	56	26	58	38	59	33	62	24	67	36	78	35	71	37	66	30	63	31	61	36	55	35	60	40	64	37	60	39
Mns.	57.6	27.9	53.4	28.3	53.7	28.5	50.5	26.7	62.3	32.3	70.4	31.7	62.5	36.1	56.2	26.7	58.7	38.3	59.5	28.8	55.7	32.3	51.7	29.8	51.5	31.8	56.8	31.2

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 11, CALIFORNIA.

Prof. ALEXANDER G. McADIE, District Editor.

GENERAL SUMMARY.

April, 1912, was the coldest April since 1897, i. e., the coldest since the tabulation of such records began. It was nearly 3° colder than April, 1911, which in its turn was a very cold month. In the matter of rainfall, April, 1912, broke all previous records for that month. Rains were frequent and well distributed and the totals in various portions of the State were far in excess of the amounts recorded in other wet Aprils. April, 1911, was a wet month, and yet the total rainfall for the State was approximately only 65 per cent of the rainfall of the present month. This rainfall was of the greatest benefit to the State. A long dry period during the winter had caused considerable apprehension, and while this was relieved by the generous rainfall of March, it was fully recognized that good rains were necessary during April to assure bountiful harvests and to permit mining and power work. At the present time the prospect is excellent for crops and while the water supply is not abundant and the season will be an early and open one in the mountains, stockmen, irrigationists, and power engineers are in no sense disheartened.

The month began with pressure distribution favorable for southerly winds, cloudy weather, and showers; but it was not until the 4th that rain fell. A short period of fair weather was followed by the development of a general depression over the eastern and southern portions of the State, extending eastward over the Great Basin. From the 8th to the 12th, inclusive, rains were general. Then followed a period of fair weather, except that in the mountains, especially the northern portion of the Sierra, showers were of frequent occurrence. During the last decade there were no features of special importance except frosts of April 22 and the showery condition which quickly followed. Some slight damage was done to garden truck and low tree fruits by the frost, apricots, peaches, and prunes being in a tender condition about this time. It is said that in one valley, the Santa Clara, more than 80,000 smudge pots or orchard heaters were used for the first time and that the results were satisfactory. The temperature, however, did not fall much below freezing and the cold period was of short duration.

No unusually high winds occurred during the month. There was less fog but not quite as much sunshine as usual, owing to high clouds.

TEMPERATURE.

The temperature for the State was 5° below the normal, making the month, as above stated, the coldest on record. The following table gives the mean temperature for California for each April during the time such records have been kept:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	°F	°F		°F.	°F.
1897	60.6	+3.6	1905	57.2	+0.2
1898	60.9	+3.9	1906	56.3	−0.7
1899	58.1	+1.1	1907	58.2	+1.2
1900	53.9	−3.1	1908	58.4	+1.4
1901	55.8	−1.2	1909	57.6	+0.6
1902	56.2	−0.8	1910	59.8	+2.8
1903	54.8	−2.2	1911	54.2	−2.8
1904	57.2	+0.2	1912	51.9	−5.1

The highest temperature recorded was 92°, on the 30th, at Heber. This was 7° lower than the highest temperature recorded during April, 1911. The lowest temperature was —14°, at Tamarack, on the 22d. This was 12° lower than the lowest temperature of April, 1911.

The highest mean temperature was 69°, at Bagdad, and the lowest was 25.8°, at Tamarack.

PRECIPITATION.

The average precipitation for California for April with departures from the normal is as follows:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	Inches.	Inches.		Inches.	Inches.
1897	0.51	−1.28	1905	1.18	−0.61
1898	0.41	−1.38	1906	1.68	−0.11
1899	0.60	−1.19	1907	1.11	−0.68
1900	2.14	+0.35	1908	0.67	−1.12
1901	2.16	+0.37	1909	0.12	−1.67
1902	1.88	+0.09	1910	0.62	−1.17
1903	1.28	−0.51	1911	1.93	+0.14
1904	2.18	+0.39	1912	3.07	+1.28

The greatest monthly precipitation was 13.86 inches, at Upper Mattole, or 5.21 inches more than the heaviest monthly amount reported during April, 1911. At 2 stations there was no rain during the month.

SNOWFALL IN THE MOUNTAINS.

April was not a month of heavy snowfall, although there were frequent snowstorms. There was very little packed snow, owing to the marked deficiency during January and February; and while more than a normal amount fell during March, it was in general loosely packed. At the close of the month the snow cover while greater than that of 1910 was far less than that of 1911.

SPECIAL COMPARATIVE REPORTS.

Summit.—The following table shows depth of snow on ground at Summit on several dates in April for a number of years:

	Apr. 1.	Apr. 15.	Apr. 30.
	Inches.	*Inches.*	*Inches.*
1907	240	165	117
1908	50	31	23
1909	188	158	129
1910	65	32	12
1911	135	146	96
1912	50	30	29

SUNSHINE.

The following table gives the total hours of sunshine and percentages of possible:

Stations.	Hours.	Per cent of possible.	Stations.	Hours.	Per cent of possible.
Eureka	141	35	Sacramento	222	56
Fresno	304	77	San Diego	238	61
Los Angeles	250	64	San Francisco	192	49
Mount Tamalpais	206	52	San Jose	240	61
Red Bluff	189	48	San Luis Obispo	214	55

There was less sunshine during the current April than during April last year.

NOTES ON THE RIVERS OF THE SACRAMENTO AND LOWER SAN JOAQUIN WATERSHEDS DURING APRIL, 1912.

By N. R. TAYLOR, Local Forecaster.

Sacramento watershed.—For the fifth consecutive month the rivers of the Sacramento drainage basin have been exceptionally low. Previous low-water records for the month were broken at all points, except at Red Bluff on the Sacramento, where the river averaged 0.4 of a foot above the low water of 1908. At Colusa, Knights Landing, and Sacramento City the Sacramento averaged from 7 to nearly 10 feet below the stages usually maintained during the month in question.

In the Feather, Yuba, and American watersheds all streams averaged the lowest on record for April.

The rainfall throughout the Sacramento Valley was deficient generally, and the amount which fell had little effect on stream flow. The greatest rise reported was at Colusa, where the river rose slightly over 3 feet during the 24 hours ending at 7 a. m. of the 12th.

Lower San Joaquin watershed.—While less than the normal amount of rain fell in this watershed, the shortage was not so marked in the higher regions as in the floor of the valley. The effect of rainfall on stream flow, however, was barely apparent in any of the rivers, all of which averaged lower than for any corresponding month of which there is a record. The San Joaquin itself, from Lathrop to the mouth of the Calaveras, averaged over 10 feet below the mean stage of the past 13 years, and was over 6 feet below the previous low-water stage for April.

NOTES ON THE RIVERS OF THE UPPER SAN JOAQUIN WATERSHED.

By W. E. BONNETT, Local Forecaster.

The stages of the streams of the Upper San Joaquin watershed continued to be extremely low during April. They were much lower than the lowest previous stages for this month in the six years of record. At Merced Falls, on the Merced River, the mean stage was 0.9 foot, as compared with a mean stage of 1.7 feet for the last six Aprils. Following some good rains on the 9th, 10th, and 11th the river at this point rose to 1.5 feet, the maximum stage of the month.

Similar conditions obtained on the San Joaquin. The mean stage at Friant was but 0.3 foot and at Firebaugh —0.4, as compared with six-year averages of 2.4 feet and 5.2 feet for these stations, respectively. The highest stage at Friant occurred on the 11th and at Firebaugh on the 13th and 14th.

At Piedra, on the Kings River, and at Three Rivers, on the Kaweah, the highest stages for the month also occurred on the 11th, but they were only a few tenths of a foot higher than the low stages which immediately preceded that date. The stages in these streams were low and remarkably uniform throughout the month.

From the irrigators' viewpoint the streams have been disappointingly low. Several canals, particularly those served from the Kings River, which by judicial decision are not entitled to water until the stream has reached a certain stage, so far this season have been without water because the stream has not risen above the required stage.

NEW HEATER AND VAPORIZER FOR FROST PROTECTION.

(Advance copy printed in Pacific Rural Press, Apr. 27, 1912.)

By Prof. A. G. MCADIE, U. S. Weather Bureau.

Various types of heaters and smudgers were described in Bulletin No. 29, United States Weather Bureau, entitled, "Frost Fighting," issued March 13, 1900.

The first heater used, so far as our knowledge goes, was the wire basket coal burner of Copley, at Riverside, Cal., in the winter of 1895–96. The first oil burner was used in California in the winter of 1900–1901. Since then many burners and orchard heaters have been devised, and there are now on the market 17 or more types of orchard heaters, most of them oil burners.

There has naturally been competition among the makers, and claims of superiority are published and widely distributed in fruit-growing States. It may be said that nearly all of the heaters are serviceable and that there is no longer any doubt concerning their protective value. The problem now is one of higher efficiency, together with cleanliness of method and ease of handling. There are two ways in which improvements can be made, one by securing a more uniform and more complete combustion, and the other (closely connected) by decreasing the amount of soot. Crude oil is unquestionably the cheapest fuel where combustion methods are used, although we believe covers are most economical in the long run. Tests by Lewis and Brown, in 1910, and by O'Gara, in 1911, show that crude oil is best per unit of cost; but the method is not a clean one, and if the orchards are located in a thickly settled community, as is the case with the orange groves of California, vigorous objection is made to the soot. Moreover, greater uniformity in the rate of combustion is desirable. With many of the present types of orchard heaters, especially the open-pail variety, the rate of combustion decreases with the time of burning. Soot arresters do not help, but rather make matters worse; and there is constant complaint that after burning a few hours the amount of heat given off is much diminished, and this at a time when heat is most needed.

With a view to meeting the above objections, two new methods are being tried at the local office of the Weather

Bureau, San Francisco. In one an improved burner is used with kerosene or some light oil as a fuel. There is also a surrounding shallow pan of water which is slowly vaporized. In the second device an electric current is employed to vaporize water. The former of these two devices will be described in this article and the latter in a subsequent paper.

The new burner is made of cheap combustible material, and there is comparatively little ash or residue left. There is no asphaltum or slag, as is the case with crude oil used on the Pacific coast. The amount of soot given off, while appreciable, is very much less (probably one-fourth or one-fifth) than that from heavy oils. The two objects sought to be obtained are, first, minimizing the amount of soot, and, second, providing a uniform rate of combustion.

The burner consists of a cardboard tube 1 inch or more in diameter. This tube is loosely packed with cotton waste, small tufts projecting at each end. When soaked with kerosene this makes an excellent wick. An ordinary fruit can, capacity 1 quart, with detachable cover, serves as a fuel holder. A hole is cut in the cover just large enough to permit the insertion of the cardboard tube. The can is nearly filled with kerosene and placed within the larger can, capacity 5 gallons. This larger can has a small opening on one side to regulate combustion and is open at the top. In practice we have used old kerosene cans. A supply of water is poured into the outer can to a depth of several inches.

The purpose of using water is twofold. First, to prevent undue heating of the outer can and thus moderate the heat, and second, to make use of the latent heat of vaporization. By supplying an increased amount of water vapor at a moderate temperature we furnish a medium which has a high absorption value for the long heat waves radiated from the soil, approximately 0.012 mm. wave length. Such an agency prevents rapid cooling through free radiation, which probably is the source of greatest loss of heat from both leaf surface and soil during frost periods. The vapor also serves to prevent a too rapid warming in the morning hours, inasmuch as the solar energy is at first utilized in doing the work of changing condensed vapor or water into invisible vapor.

We have practically an oil pot in a water jacket. By placing the cans vertically one on top of another we can bring, if desired, the level of the source of heated air and heated vapor nearer the level of the fruit, and thus minimize the loss of heat which now takes place with burners of the single type resting on the ground. This is an important point because at the present time, with a hundred burners to the acre, using a gallon each of oil, something like 15,000,000 British thermal units or 3,760,000 calories would be given off, provided the combustion was perfect, which of course is never true. Now, to raise the temperature of the air 1° F. over an acre to a height of 15 feet is practically heating 653,400 cubic feet of air. In practice it is found that to maintain the temperature on a still night 1° above freezing requires 0.252 calories per hour per cubic foot. Therefore for a period of 7 hours, which is about the average duration of the low temperature, although 10 hours is a safer period, there will be required 1,138,200 calories. And if a raise of 5° is required it is evident that more than 5,500,000 calories are needed; or more than the full number of heat units in the fuel under perfect combustion. It is evident that we must reduce the mass of air to be heated and apply the heat to those portions of the air in the vicinity of the fruit or plant to be protected. This will materially improve the efficiency of the protective device, as there is no gain in warming up all out-of-doors. This is the weakness of large fires, where the heat is carried by convectional currents to levels 30, 50, or 100 feet above the ground. For purposes of protection this heat is wasted.

Nor is it necessary to warm the lowermost strata. It is enough to warm the layer between 6 and 15 feet above the ground. As is well known, the level of the tree tops is generally warmer than the levels near the ground. In the new device we seek to provide a layer of water vapor at or about the level of the tree top. The cold air that has settled to the ground should not be displaced, but allowed to remain. The mixture of warmed air and warmed vapor rising from a source 5 or 6 feet above the ground will not displace the colder, drier, and more dense air near the ground. The problem is essentially one of proper utilization of the heat available. In our present methods there is great extravagance in the use of heat.

TABLE 1.—*Climatological data for April, 1912. District No. 11, California.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Oregon.																				
Klamath Agency	Klamath	4,769	4	45.6	.....	76	8	24	13	41	0.71	.....	0.40	7.0	3	17	5	8	w.	Edson C. Watson.
Klamath Falls	do	4,100	23	42.3	− 5.1	73	10	21	5	41	1.49	+ 0.58	0.43	4.0	8	8	2	20	se.	W. H. Helleman.
Lakeview	Lake	4,825	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ralph E. Koozer.
Merrill	Klamath	4,070	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Agnes Ritchson.
Yonna	do	4,146	5	38.7	.....	70	7	12	5	47	1.86	.....	0.55	0	8	3	20	7	s.	Jacob Ruecke.
California.																				
Alameda	Alameda	19	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Chas. E. Sears.
Alturas	Modoc	4,460	8	40.9	.....	72	6	17	5	54	2.71	.....	0.46	18.0	12	6	14	10	sw.	Prof. C. B. Towle.
Angiola	Tulare	208	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Santa Fe Co.
Antioch **	Contra Costa	46	33	55.8	− 3.9	78	13	35	23	....	0.52	− 0.30	0.28	0	5	18	0	12	.....	Southern Pacific Co.
Aptos	Santa Cruz	102	27	54.8	− 0.1	67	25	40	12	....	3.23	+ 1.16	1.81	0	6	11	6	13	nw.	Do.
Arrowhead Springs	San Bernardino	2,000	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. E. A. Crokat.
Auburn	Placer	1,360	41	49.8	− 6.7	71	9	30	20	35	1.66	− 1.36	0.64	0	6	14	7	9	.....	Southern Pacific Co.
Avalon	Los Angeles	30	2	55.6	.....	66	24	45	11†	17	1.56	.....	0.49	0	7	24	4	2	w.	T. S. Manning.
Azusa	do	540	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. P. Griffith.
Bagdad	San Bernardino	784	9	69.0	.....	88	30	42	12	27	0.00	.....	0.00	0	0	.....	.....	.....	.....	Santa Fe Co.
Bakersfield	Kern	404	23	58.9	− 4.6	78	7	42	20	27	1.16	+ 0.84	0.43	0	6	.....	.....	.....	.....	Do.
Barstow	San Bernardino	2,105	9	59.4	.....	90	7	33	21	46	0.21	+ 0.14	0.21	0	1	19	5	6	w.	E. L. White.
Berkeley	Alameda	317	25	52.5	− 2.2	65	17	39	12	20	1.47	− 0.11	0.48	0	7	11	13	6	sw.	State University.
Biggs **	Butte	98	13	56.4	− 3.0	74	17	43	12	....	2.13	+ 1.14	0.70	0	8	15	4	11	s.	Southern Pacific Co.
Bishop	Inyo	4,450	17	48.2	− 5.3	78	2†	17	22	56	0.62	+ 0.33	0.33	0	3	.....	.....	.....	.....	Paul E. Lodge.
Bishop Creek	do	8,500	2	33.3	.....	56	30	9	13†	29	3.70	.....	1.20	37.0	7	17	0	13	.....	Do.
Blocksburg	Humboldt	1,700	6	46.0	.....	69	1	28	19	37	8.37	.....	1.25	1.5	18	3	5	22	se.	Victor Hope.
Blue Canyon	Placer	4,695	13	41.6	− 5.3	62	1†	21	12	28	7.06	+ 3.52	1.42	33.0	12	11	7	12	s.	Southern Pacific Co.
Blythe	Riverside	268	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Carey.
Branscomb	Mendocino	2,000	12	45.4	.....	70	1†	27	22	38	8.14	+ 4.01	2.60	9.0	12	11	8	11	n.	A. J. Haun.
Brawley	Imperial	−105	3	65.6*	.....	89	28	38	12	42	T.	.....	T.	0	0	.....	.....	.....	.....	M. D. Witter.
Burney	Shasta	3,300	2	43.4	.....	75	8	22	17†	48	2.86	.....	1.46	2.0	7	4	15	11	sw.	Mrs. M. D. Chambers.
Cahuilla	Riverside	3,600	1	44.8	.....	73	23	14	26	47	4.05	.....	2.26	22.5	8	12	12	6	sw.	Carl Stevens.
Calexico	Imperial	0	7	66.4	.....	90	29	44	13	40	0.00	.....	0.00	0	0	28	0	2	nw.	J. E. Peck.
Caliente **	Kern	1,290	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Southern Pacific Co.
Calistoga	Napa	363	40	45.3	−12.5	75	30	30	15	....	2.14	− 0.44	0.80	0	7	11	0	19	w.	Do.
Campbell	Santa Clara	217	15	50.7	− 4.2	70	6†	31	22	35	1.72	+ 0.76	0.42	0	8	12	7	11	nw.	F. M. Righter.
Camptonville (near)	Yuba	3,500	5	48.1	.....	74	1	28	13	38	7.57	.....	2.24	11.0	13	3	12	15	s.	Cal. Gas & Elect. Co.
Cedarville	Modoc	4,675	18	42.1	− 4.1	69	6†	24	19†	40	1.10	+ 0.27	0.19	7.0	10	8	22	0	sw.	T. H. Johnstone.
Chico	Butte	189	42	54.2	− 7.4	76	8†	34	25	40	2.14	+ 0.47	1.17	0	6	10	5	15	s.	G. H. Stephenson.
China Flat	Humboldt	600	3	53.4	.....	82	1	33	1	49	6.75	.....	2.04	0	13	4	11	15	s.	O. L. Westerburg.
Chino **	San Bernardino	714	20	55.7	− 5.1	79	23	39	13	....	2.53	+ 2.05	1.32	0	6	10	0	20	e.	Southern Pacific Co.
Cisco **	Placer	5,939	41	41.4	+ 4.1	62	7	25	19	....	6.00	+ 2.16	2.00	60.0	13	17	2	11	.....	Do.
Claremont	Los Angeles	1,200	20	54.0	− 3.8	80	23	33	12	34	2.79	+ 2.06	1.27	0	9	7	14	9	.....	Prof. F. P. Brackett.
Cloverdale	Sonoma	340	10	49.4	− 8.4	75	15	49	24	33	3.34	+ 1.53	1.15	0	10	20	1	9	s.	John O. Ogle.
Coalinga	Fresno	.....	.....	55.2	.....	79	6	35	20	37	1.71	.....	1.00	0	6	20	7	3	w.	Union Oil Co.
Colfax	Placer	2,421	41	45.8	− 8.8	66	1†	29	10†	31	5.16	+ 1.00	1.04	T.	10	8	8	14	n.	Southern Pacific Co.
Colusa	Colusa	60	9	55.3	.....	75	7†	36	12	32	1.04	− 0.09	0.75	0	5	14	14	2	.....	C. D. McComish.
Corning **	Tehama	277	26	59.6	− 0.7	74	8	46	1†	....	2.06	+ 0.70	0.63	0	7	8	15	7	s.	Southern Pacific Co.
Cuyamaca	San Diego	4,677	13	42.6	− 3.0	64	23	26	11	25	4.38	+ 2.08	1.91	22.0	6	10	7	13	e.	L. L. Macquarie.
Davisville	Yolo	51	40	53.8	− 7.0	78	1	30	19	44	1.37	+ 0.15	0.76	0	5	10	16	4	sw.	S. H. Brackett.
Deer Creek	Nevada	3,700	5	41.4	.....	63	1	25	12†	35	8.11	.....	3.05	20.0	15	5	11	14	s.	Cal. Gas & Elect. Co.
Del Monte	Monterey	25	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Warner.
Delta	Shasta	1,138	27	54.7	− 2.4	82	2†	34	10	47	7.42	+ 1.95	3.50	2.5	8	17	2	11	n.	Southern Pacific Co.
Denair	Stanislaus	126	12	51.0	− 7.4	80	29	31	30	43	1.02	+ 0.03	1.00	0	2	20	0	10	.....	Santa Fe Co.
De Sabla	Butte	2,500	8	46.2	.....	66	8	31	19†	30	5.32	.....	1.80	10.0	9	5	18	7	sw.	Cal. Gas & Elec. Co.
Dobbins (near)	Yuba	1,650	8	53.4	.....	72	8	36	13	28	3.13	.....	1.14	0	9	8	15	7	s.	Do.
Downieville	Sierra	3,150	1	45.8	.....	71	5	26	20†	41	7.03	.....	2.42	7.0	13	3	17	10	s.	J. T. Mason.
Dudley	Kings	595	....	58.2	.....	80	7	37	20	36	1.15	.....	0.85	0	5	16	10	4	ne.	Union Oil Co.
Dudleys	Mariposa	3,000	3	44.3	.....	67	2	22	11†	36	4.05	.....	1.75	3.0	10	6	12	12	nw.	W. H. Dudley.
Dunlap (near)	Fresno	2,800	....	48.2	.....	72	6	27	19	35	4.03	.....	1.03	0	13	8	13	9	.....	U. S. Forest Service.
Dunnigan **	Yolo	65	35	61.9	− 0.5	73	5†	45	11	....	1.45	+ 0.11	0.49	0	7	16	3	11	n.	Southern Pacific Co.
Dunsmuir **	Siskiyou	2,285	23	47.1	− 6.3	78	8	34	11†	....	4.92	+ 1.32	1.82	1.5	11	9	0	21	s.	Do.
Durham	Butte	160	17	53.8	− 4.2	75	6	35	22	35	2.60	+ 0.87	0.97	0	7	9	7	14	s.	R. W. Durham.
El Cajon	San Diego	482	13	56.1	− 3.6	79	23	39	1†	39	2.42	+ 1.79	0.95	0	7	23	5	2	w.	H. H. Kessler.
Electra	Amador	725	8	54.3	.....	76	6	36	22	32	3.45	.....	1.23	0	8	17	4	9	.....	Cal. Gas & Elec. Co.
Elsinore	Riverside	1,234	17	56.1	− 4.3	85	23	33	13†	44	1.80	+ 1.32	0.87	0	4	16	8	6	w.	A. F. Schult.
Emigrant Gap	Placer	5,230	38	38.5	− 4.0	61	1	21	12	24	5.55	+ 1.10	1.90	36.0	8	5	10	15	.....	Southern Pacific Co.
Escondido	San Diego	657	18	56.2	− 2.2	76	22†	38	21	35	3.11	+ 2.26	1.42	0	5	0	26	4	w.	A. R. Moon.
Eureka	Humboldt	64	26	48.4	− 1.1	61	22	38	19	23	5.92	+ 1.64	1.87	0	18	1	15	14	se.	U. S. Weather Bureau.
Farmington **	San Joaquin	111	33	56.6	− 2.5	77	7	40	12†	....	1.26	− 0.32	0.65	0	6	9	17	4	se.	Southern Pacific Co.
Folsom	Sacramento	252	40	54.2	− 6.6	74	6	36	22	35	3.27	+ 1.22	0.87	0	9	14	4	12	n.	F. O. Hutton.
Fordyce Dam	Nevada	6,500	17	40.4	.....	60	1	19	12	36	6.87	+ 2.45	1.55	54.0	16	2	15	13	sw.	E. E. Roeding.
Fort Bidwell	Modoc	4,735	23	39.0	− 8.3	74	7	13	11	55	0.47	− 1.24	0.15	0	5	6	7	17	w.	C. R. Decious.
Fouts Springs	Colusa	1,650	8	50.2	.....	72	8†	28	12	41	2.65	.....	1.52	0	8	.....	.....	.....	.....	A. J. Burgi.
Fresno	Fresno	293	25	56.8	− 4.4	77	6	37	13	35	1.86	+ 0.32	0.86	0	10	13	10	7	nw.	U. S. Weather Bureau.
Galt **	Sacramento	49	34	53.4	− 7.8	70	1	42	12	....	2.08	+ 0.57	0.90	0	6	14	4	12	sw.	Southern Pacific Co.
Georgetown	El Dorado	2,650	39	46.6	− 8.8	66	1†	31	12	26	6.76	+ 1.45	1.68	0	12	14	0	16	.....	H. D. Jerrett.
Gilroy **	Santa Clara	193	38	54.5	− 3.3	75	14†	40	21†	....	2.89	+ 1.39	0.98	0	10	16	0	14	s.	Southern Pacific Co.
Gilta	Siskiyou	3,300	2	45.6	.....	74	1	22	19	37	7.36	.....	2.86	3.0	15	12	0	18	s.	A. Dannenbrink.
Glennville	Kern	3,300	2	45.8	.....	66	7†	27	20	31	3.50	.....	1.05	6.0	9	7	14	9	w.	C. H. Likely.
Gold Run	Placer	3,222	13	45.6	− 8.6	65	2†	28	12	25	6.10	+ 3.49	1.65	16.0	10	13	3	14	n.	Southern Pacific Co.
Gonzales **	Monterey	127	13	57.3	+ 1.7	68	17†	44	10	....	2.35	+ 1.71	1.10	0	3	24	1	5	n.	Do.
Grass Valley	Nevada	2,690	40	45.2	.....	65	.1†	27	19	29	5.97	+ 1.45	1.81	3.5	10	5	18	7	sw.	F. R. Hull.
Greenland Ranch	Inyo	−178	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. W. Corkhill.
Greenville	Plumas	3,600	18	44.5	− 2.7	73	8	22	19	47	3.77	+ 1.27	1.93	2.5	12	4	7	19	sw.	C. H. Higbie.
Groveland	Tuolumne	2,828	3	45.2	.....	65	2†	26	20	31	5.82	.....	2.21	3.0	10	5	22	3	.....	H. S. Richardson.
Guinda **	Yolo	350	14	48.6	− 9.5	69	30	34	11†	....	0.25	− 0.83	0.15	0	2	12	14	4	.....	Southern Pacific Co.
Hanford	Kings	249	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Santa Fe Co.
Healdsburg	Sonoma	110	19	54.3	− 2.6	82	26	33	22	41	2.72	− 0.02	1.07	0	10	15	3	12	s.	F. J. Kinley.
Hearst	do	1,800	2	47.8	.....	74	6	29	2	43	5.20	.....	2.30	1.1	10	17	2	11	nw.	H. D. Ellmaker.
Heber	Imperial	− 20	6	65.0	.....	92	30	39	13	47	T.	.....	T.	0	0	20	10	0	w.	C. J. Booth.
Hetch Hetchy	Tuolumne	3,665	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. W. Brown.
Hollister	San Benito	284	38	51.5	− 6.7	67	1†	34	13†	32	2.30	+ 1.25	0.85	0	11	14	8	8	w.	J. N. Thompson.
Hornbrook **	Siskiyou	2,154	24	48.2	− 3.5	71	9	35	8†	....	0.66	+ 0.08	0.15	0	8	8	20	2	n.	Southern Pacific Co.
Hot Springs	Tulare	3,300	5	45.8	.....	68	8	29	20†	31	4.97	.....	1.31	3.2	9	15	10	5	.....	U. S. Forest Service.
Hullville	Lake	2,250	5	46.3	.....	73	4	26	19	40	6.63	.....	2.54	7.0	12	2	9	19	sw.	T. H. Betterton.
Idyllwild	Riverside	5,250	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Earl Powers.

TABLE 1.—*Climatological data for April, 1912. District No. 11*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
California—Continued.																				
Independence	Inyo	3,907	16																	U. S. Weather Bureau.
Indio	Riverside	−20	34	67.6	− 4.9	90	23†	39	12	37	0.35	+ 0.28	0.30	0	2	23	4	3	nw.	F. N. Johnson.
Inskip	Butte	4,975	5	38.9	.....	66	1	24	12†	22	7.33	.....	3.53	22.8	8	3	9	18	.....	Cal. Gas & Elec. Co.
Ione **	Amador	287	34	58.1	− 0.6	76	8†	41	1	....	2.71	+ 0.69	0.69	0	8	13	0	17	sw.	Southern Pacific Co.
Jamestown	Tuolumne	1,471	9	50.7	.....	73	10	31	1†	40	4.28	.....	1.60	0	11	13	1	16	w.	Sierra Railway Co.
Kennett	Shasta	730	....	54.2	.....	82	8	34	11†	37	9.29	.....	1.94	0	13	9	17	4	sw.	O. J. Egleston.
Kentfield	Marin	65	24	53.3	.....	75	5	36	13	36	3.37	+ 0.91	1.43	0	7	13	9	8	.....	Miss M. E. Parsons.
King City	Monterey	333	25	61.6	+ 5.1	83	19†	38	11	35	2.78	+ 2.27	1.56	0	5	15	0	15	s.	Southern Pacific Co.
Lake Eleanor	Tuolumne	4,700	2																	O. J. Todd.
La Porte	Plumas	5,000	18	38.4	− 3.8	62	1	20	13	32	7.83	+ 2.56	2.77	53.3	14	5	18	7	s.	Chas. W. Hendel.
Le Grand	Merced	255	12	54.2	− 3.2	76	6	36	14	36	2.19	+ 1.38	0.84	0	8	19	1	10	.....	Santa Fe Co.
Lemon Cove	Tulare	600	17	58.6	− 3.8	85	2	31	21	52	3.11	+ 1.54	0.75	0	7	9	16	5	w.	G. W. Sandidge.
Lick Observatory	Santa Clara	4,209	23	40.0	− 6.4	57	23	26	12†	24	2.70	− 0.11	0.80	0	9	6	7	17	nw.	The Director.
Livermere	Alameda	485	41																	E. G. Still.
Lodi	San Joaquin	45	30	55.9	− 2.4	76	23	36	22	34	2.35	+ 1.46	1.10	0	7	9	12	9	w.	Ezra Fiske.
Lone Pine	Inyo	2,728	7	51.3	.....	80	30	25	12†	42	0.55	.....	0.55	0	1	22	6	2	s.	G. F. Marsh.
Long Valley	Lassen	4,400	3	44.4	.....	69	6	21	19	40	1.38	.....	0.91	1.0	10	5	2	23	sw.	A. G. Evans.
Los Angeles	Los Angeles	293	35	56.4	− 1.2	76	23	44	11	24	1.66	+ 0.30	0.70	0	7	10	11	9	ne.	U. S. Weather Bureau.
Los Banos **	Merced	121	25	56.6	− 6.0	72	25	40	12	....	1.87	+ 1.31	0.84	0	7	13	0	17	s.	Southern Pacific Co.
Los Gatos	Santa Clara	600	25	52.5	− 3.8	73	23	35	22	32	3.66	+ 1.63	1.25	0	6	14	3	13	n.	F. H. McCullagh.
McCloud	Siskiyou	3,410	2	44.2	.....	77	9	18	19	46	6.10	.....	2.14	12.0	10	10	15	5	s.	F. F. Spencer.
Macdoel	....do	4,258	5	37.7	.....	67	1	19	5†	44	1.95	.....	0.50	0	5	4	17	9	s.	Butte Valley Land Co.
Madeline	Lassen	5,270	3	37.4	.....	66	6	17	19	46	1.71	.....	0.30	19.0	12	4	5	21	nw.	J. H. Williams.
Magalia	Butte	2,321	8	48.4	.....	76	8	29	18	38	7.69	.....	2.00	0	11	16	5	9	se.	Butte Co. R. R. Co.
Mammoth Tank	Imperial	257	34	66.6	− 8.8	90	7	41	13	36	0.15	+ 0.06	0.15	0	1	19	8	3	w.	Southern Pacific Co.
Maricopa	Kern	640	1	57.4	.....	78	6†	38	12	31	0.80	.....	0.39	0	6	14	8	8	n.	Union Oil Co.
Marysville	Yuba	67	41	55.4	− 6.6	76	8	38	9	33	1.85	+ 0.34	0.63	0	7	14	0	16	s.	Southern Pacific Co.
Mecca	Riverside	−185	6	66.2	.....	90	23	40	12	40	T.	.....	T.	0	0	20	10	0	nw.	E. A. Palmer.
Menlo Park **	San Mateo	64	34	55.1	− 2.0	68	23	38	12†	....	1.45	+ 0.13	0.55	0	8	11	12	7	.....	Southern Pacific Co.
Merced	Merced	173	38																	Santa Fe Co.
Middlewater	Kern	.....	1	57.5	.....	78	6†	40	11†	34	1.86	.....	0.90	0	6	12	7	11	n.	Union Oil Co.
Mill Creek No. 1	Amador	.....	5	45.4	.....	66	6	30	19†	30	4.65	.....	1.26	2.0	12	6	12	12	s.	Cal. Gas & Elec. Co.
Milton (near)	Calaveras	660	21	53.8	− 4.8	73	6	37	13†	30	1.89	+ 0.25	0.80	0	9	13	12	5	nw.	J. H. Southwick.
Modesto **	Stanislaus	90	40	59.2	− 3.0	75	6†	45	11	....	1.00	+ 0.12	0.75	0	2	14	0	16	.....	Southern Pacific Co.
Mojave	Kern	2,751	35	54.8	− 4.9	71	30	32	4	16	0.50	+ 0.29	0.50	T.	1	26	2	2	.....	Do.
Mokelumne Hill	Calaveras	1,550	19	50.4	− 4.3	70	6	31	11	29	2.78	− 0.01	0.91	0	9	9	5	16	.....	C. E. Prindle.
Mono Ranch	Ventura	3,210	6	47.1	.....	70	23	27	13	36	2.80	.....	1.49	3.5	4	18	7	5	nw.	Herbert Lathrop.
Montague	Siskiyou	2,450	24	45.5	− 7.8	74	1†	21	5	47	1.46	+ 0.89	0.66	T.	10	5	14	11	s.	I. E. Deboy.
Monterey **	Monterey	15	47	54.4	− 1.4	64	8	46	15	....	3.41	+ 2.03	1.78	0	7	5	0	25	se.	Southern Pacific Co.
Monterio	Kern	4,500	13	43.1	−10.4	62	5	28	13	20	1.31	− 0.51	0.50	0	8	10	4	16	nw.	John C. Knecht.
Mount Tamalpais	Marin	2,375	13	44.4	− 5.1	59	15	32	11	19	2.15	+ 0.15	0.61	0	12	11	7	12	nw.	U. S. Weather Bureau.
Napa City	Napa	20	35	50.0	− 5.1	70	5†	32	12†	34	1.72	− 0.19	0.70	0	4	0	9	21	sw.	Alex. Hull.
Napa (S. H.)	....do	60	34	51.4	− 5.4	66	5	35	12†	28	1.47	− 0.44	0.56	0	5	9	12	9	sw.	W. H. Martin.
Needles	San Bernardino	477	20	68.9	− 2.8	89	29	45	1	30	0.10	+ 0.02	0.10	0	1	27	0	3	.....	Santa Fe Co.
Nellie	San Diego	5,350	3	47.0	.....	66	25	26	21	36	7.90	.....		42.0	4					T. O. Bailey.
Nevada City	Nevada	2,580	20	46.0	− 4.5	71	1†	25	20	41	5.51	+ 1.01	1.47	5.0	10	5	20	5	sw.	S. W. Marsh.
Newhall **	Los Angeles	1,200	35	52.6	− 6.3	80	2†	40	12	....	1.88	+ 0.84	0.84	0	5	18	4	8	se.	Southern Pacific Co.
Newman	Stanislaus	91	23	63.8	+ 1.7	80	5†	48	12	22	0.99	+ 0.29	0.39	0	7	8	0	22	n.	E. S. Wangenheim.
North Bloomfield	Nevada	3,214	15	50.4	− 0.9	67	5	32	27	24	5.74	+ 0.65	1.70	0	6	4	10	16	s.	J. R. McIntosh.
North Fork	Madera	3,000	8	48.3	.....	78	14	26	20	46	5.43	.....	1.62	0	12	8	18	4	sw.	U. S. Forest Service.
Oakdale **	Stanislaus	156	18	56.2	− 1.4	78	6	38	20	....	1.12	− 0.02	0.52	0	3	14	11	5	nw.	Southern Pacific Co.
Oak Grove	San Diego	2,751	2	47.8	.....	73	2†	24	13	43	2.76	.....	1.73	11.0	6	18	8	4	nw.	B. L. Johnson.
Oakland	Alameda	36	36	54.6	− 0.8	70	23	41	12†	24	1.07	− 0.49	0.31	0	6	11	10	9	.....	Chabot Observatory.
Oceanside	San Diego	60	2	58.4	.....	70	23	45	12	21	2.36	.....	0.59	0	8	12	10	8	w.	H. D. Brodie.
Ojai Valley	Ventura	900	6	53.6	.....	78	23	31	12	38	1.91	.....	0.70	0	4	15	12	3	sw.	W. H. Duncan.
Orland	Glenn	254	30	54.9	− 8.5	78	8	35	11	35	1.91	+ 0.67	0.58	0	10	13	7	10	se.	U. S. Reclamation Service.
Orleans	Humboldt	520	9	58.0	.....	88	2	36	22	50	6.68	.....	1.76	0	19	5	0	25	.....	F. T. Hale.
Oroville (near)	Butte	250	28	56.0	− 3.5	78	1	38	11†	39	2.36	+ 0.38	0.95	0	7	6	11	13	s.	E. D. Fairchild.
Palermo	....do	213	21	56.9	− 1.8	79	6	37	17†	38	1.40	− 0.14	0.75	0	5	20	5	5	n.	Western Pacific Co.
Palm Springs **	Riverside	584	23	63.0	− 9.4	84	16†	40	14	....	0.12	+ 0.08	0.05	0	3	20	3	7	w.	Southern Pacific Co.
Pasadena	Los Angeles	827	22	54.6	− 5.5	80	23	36	13	36	2.62	+ 2.34	1.08	0	7	26	1	3	sw.	E. D. Sorver.
Paso Robles	San Luis Obispo	800	25	51.8	+ 6.0	77	2	28	13	44	2.89	+ 2.24	1.07	0	6	23	4	3	nw.	Dr. F. W. Sawyer.
Peachland	Sonoma	190	16	50.7	− 5.4	76	17	29	22	40	2.40	+ 0.41	0.74	0	10	11	11	8	sw.	E. H. Parnell.
Placerville	El Dorado	1,875	23	49.2	− 3.0	70	22	30	22†	40	4.15	− 0.10	1.02	0	7					A. Baring-Gould.
Point Lobos	San Francisco	250	19	50.0	− 4.2	63	14	44	9†	15	1.44	+ 0.61	0.49	0	8	19	1	10	nw.	John Hyslop.
Point Reyes	Marin	490	20	49.4	− 1.7	58	3	42	11	13	0.71	− 0.63	0.24	0	11	12	5	13	nw.	U. S. Weather Bureau.
Porterville	Tulare	464	23																	Leslie McAuliff.
Quincy	Plumas	3,490	17	42.9	− 5.1	69	8	21	13	44	3.20	+ 0.71	2.35	1.5	6	8	12	10	w.	U. S. Forest Service.
Red Bluff	Tehama	307	35	54.6	− 4.5	76	8	37	12	32	2.63	+ 0.47	1.25	0	11	9	10	11	se.	U. S. Weather Bureau.
Redding	Shasta	552	37	56.3	− 3.9	82	8	36	12	36	4.96	+ 2.00	1.27	0	10	14	7	9	s.	W. W. Jones.
Redlands	San Bernardino	1,352	19	54.6	− 6.1	81	23	36	12	36	2.85	+ 2.16	0.93	0	8	11	8	11	w.	P. W. Moore.
Reedley	Fresno	347	12	56.4	− 5.2	77	8	38	13†	33	1.49	+ 0.50	0.60	0	5	20	1	9	n.	Santa Fe Co.
Rialto (near)	San Bernardino	2,250	6	52.0	.....	78	24	34	11	31	6.79	.....	1.98	2.0	10	8	14	8	se.	Southern Cal. Edison Co.
Riverside	Riverside	851	30	56.2	− 4.2	84	23	36	20	44	1.79	+ 1.11	1.02	0	6	11	13	6	sw.	J. N. D. Cox.
Rocklin	Placer	249	41	54.4	− 6.0	75	6†	35	20†	35	3.04	+ 1.31	1.00	0	10	13	0	17	se.	Southern Pacific Co.
Rohnerville	Humboldt	75	9	49.6	.....	68	6	31	5	33	6.41	.....	1.58	0	13	4	14	12	nw.	Dr. R. Callahan.
Sacramento	Sacramento	71	35	54.4	− 3.6	72	17	36	12	29	1.69	− 0.59	0.65	0	7	11	12	7	s.	U. S. Weather Bureau.
St. Helena	Napa	255	4	53.6	.....	76	5†	32	22	41	2.23	.....	0.93	0	8	17	2	11	w.	E. E. Hooper.
Salinas	Monterey	40	38	52.3	− 3.5	69	27	32	22	31	2.89	+ 1.72	1.16	0	6	20	3	7	w.	Miss E. Ruth Abbott.
San Bernardino	San Bernardino	1,054	20	56.5	− 3.3	85	23	36	21†	46	3.67	+ 2.50	1.48	0	9	10	13	7	sw.	Dr. A. K. Johnson.
San Diego	San Diego	93	41	56.1	− 2.1	67	23	45	13	17	2.13	+ 1.37	1.04	0	8	16	8	6	nw.	U. S. Weather Bureau.
San Francisco	San Francisco	207	41	52.8	− 0.9	66	14	44	10	17	1.38	− 0.59	0.80	0	11	11	8	11	w.	Do.
San Jacinto	Riverside	1,550	19	56.6	− 2.2	85	23	35	20	44	3.24	+ 2.42	1.26	0	6	9	12	9	w.	E. T. Tanner.
San Jose	Santa Clara	95	37	52.2	− 4.5	71	23	33	23	33	1.95	+ 0.59	0.78	0	9	12	10	8	nw.	U. S. Weather Bureau.
San Luis Obispo	San Luis Obispo	201	17	51.5	− 3.7	67	23	34	13	26	2.27	+ 0.30	1.22	0	7	9	10	11	nw.	Do.
San Mateo **	San Mateo	22	38	57.1	+ 0.3	72	15†	48	11†	....	1.31	− 0.26	0.65	0	5	17	5	8	n.	Southern Pacific Co.
San Miguel **	San Luis Obispo	616	25	55.6	− 3.4	75	6	38	12†	....	2.56	+ 2.06	1.21	0	6	12	11	7	.....	Do.
San Miguel Island	Santa Barbara	500	18																	Capt. W. G. Waters.
Sanger **	Fresno	371	23	61.3	− 3.1	86	30	44	10	....	2.00	+ 1.39	0.69	0	9	16	0	14	.....	Southern Pacific Co.
Santa Barbara	Santa Barbara	130	28	54.6	− 3.1	73	23	40	13	29	2.12	+ 0.94	1.08	0	5	18	9	3	se.	G. W. Russell.
Santa Clara	Santa Clara	90	23	52.7	− 3.2	72	23	32	22	36	1.83	+ 0.76	0.61	0	7	14	5	11	nw.	Santa Clara College.
Santa Cruz	Santa Cruz	20	39	52.6	− 5.2	71	15†	33	12	35	2.17	+ 0.15	0.70	0	7	19	6	5	nw.	W. R. Springer.
Santa Margarita **	San Luis Obispo	996	23	48.8	− 7.8	70	2†	32	19	....	3.56	+ 2.02	1.43	0	5	7	2	21	sw.	Southern Pacific Co.
Santa Maria	Santa Barbara	220	24	56.0	− 2.0	74	2†	36	11	32	0.69	− 0.18	0.23	0	5	25	0	5	w.	Edwin Morris.
Santa Monica	Los Angeles	110	27	52.4	− 7.2	66	26	39	12	20	1.67	+ 1.04	0.98	0	3	18	8	4	w.	N. D. Ingham.
Santa Rosa	Sonoma	181	23	51.3	− 4.4	75	17	29	12	38	1.54	− 0.10	0.58	0	9	10	2	18	s.	Southern Pacific Co.

TABLE 1.—*Climatological data for April, 1912. District No. 11*—Continued.

Stations.	Counties.	Elevation, feet	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
California—Continued.																				
Selma **	Fresno	311	26	58.5	− 3.8	80	24	42	11	....	1.84	+ 1.15	0.76	0	8	18	0	12	.....	Southern Pacific Co.
Seven Oaks	San Bernardino	5,000	2	43.2	.....	68	24	20	12	40	2.23	.....	.....	12.7	6	24	1	5	w.	M. Lewis.
Shasta	Shasta	1,048	16	49.2	−11.9	72	7†	27	11	41	5.27	+ 1.29	1.83	0	9	17	7	6	nw.	Dr. T. J. Edgecomb.
Sierra Madre	Los Angeles	1,400	15	52.7	− 6.7	80	23	37	12	37	4.61	+ 3.20	1.41	0	9	15	2	13	se.	Mrs. A. E. Gregory.
Sierraville	Sierra	5,000	2	34.5	.....	69	1	5	1	64	2.31	.....	1.50	T.	4	6	5	19	sw.	C. D. Johnson.
Sisson	Siskiyou	3,555	23	41.2	− 6.0	66	9	25	4†	33	4.13	+ 1.67	1.95	12.0	14	3	18	9	s.	Southern Pacific Co.
Soledad **	Monterey	188	38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Sonora	Tuolumne	1,825	24	50.0	.....	70	23	31	20	32	3.68	+ 1.07	1.66	0	7	14	10	6	nw.	Chas. P. Jones.
Southeast Farallon	San Francisco	30	9	50.6	.....	59	14	43	11	9	1.24	.....	0.46	0	9	14	8	8	nw.	U. S. Weather Bureau.
Springville	Tulare	4,000	5	44.0	.....	68	8	23	20	36	4.52	.....	1.30	24.0	7	13	0	17	.....	D. L. Wishon.
Squirrel Inn	San Bernardino	5,280	2	39.8	.....	60	23	25	12	24	6.51	.....	3.11	24.0	7	13	10	7	sw.	A. D. Frantz.
Stanwood	Butte	2,140	8	48.0	.....	70	17	30	1†	36	4.76	.....	2.21	0	6	18	0	12	ne.	California Gas & Elec. Co.
Stirling City	....do	3,525	8	48.4	.....	68	9	32	12†	25	5.10	.....	2.00	12.5	7	8	8	14	se.	Butte Co. R. R. Co.
Stockton (S. H.)	San Joaquin	23	41	55.0	− 3.9	73	5†	38	12†	31	1.54	+ 0.43	0.79	0	7	14	12	4	nw.	State Hospital.
Storey	Madera	296	12	52.2	− 5.8	74	6†	28	4†	39	1.81	+ 1.07	1.00	0	6	19	0	11	.....	Santa Fe Co.
Suisun **	Solano	20	32	53.0	− 6.9	70	17	42	22	....	1.67	+ 0.38	0.64	0	6	18	4	8	sw.	Southern Pacific Co.
Sulphur Banks	Lake	1,350	....	54.1	.....	72	2†	35	19	32	1.53	.....	0.62	0	4	17	8	5	w.	J. T. La Bree.
Summerdale	Mariposa	5,270	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. J. E. Lowry.
Summit	Placer	7,017	30	33.2	− 2.3	49	25	20	1†	26	3.50	− 1.10	1.50	35.0	8	9	4	17	sw.	Southern Pacific Co.
Susanville	Lassen	4,175	23	43.8	− 3.6	68	8	22	20	38	1.85	+ 0.79	1.01	1.0	9	8	20	2	sw.	James Branham.
Tamarack	Alpine	8,000	6	25.8	.....	52	1	−14	22	58	7.00	.....	1.50	80.0	13	3	18	9	sw.	California Gas & Elec. Co.
Tehachapi **	Kern	3,964	35	49.8	− 0.4	70	7	33	10	....	1.83	+ 0.58	0.60	9.0	7	.....	.....	.....	.....	Southern Pacific Co.
Tehama **	Tehama	220	41	54.2	− 6.5	74	2	38	15	....	1.39	+ 0.12	0.58	0	3	18	3	9	s.	Do.
Tejon Rancho	Kern	1,500	10	48.4	.....	64	2†	29	20	24	1.57	.....	0.72	0	7	13	0	17	s.	S. E. Bailey.
Three Rivers	Tulare	870	2	54.5	.....	78	6	32	20†	37	3.63	.....	0.76	0	10	5	19	6	sw.	E. D. Barton.
Towle	Placer	3,704	26	43.0	− 8.1	64	1†	26	11	31	7.63	+ 4.36	2.00	13.0	10	6	11	13	sw.	Southern Pacific Co.
Tracy **	San Joaquin	64	32	57.9	− 3.0	68	1†	46	12	....	1.24	+ 0.38	0.30	0	7	6	15	9	w.	Do.
Ukiah	Mendocino	620	19	52.0	− 2.7	78	5	30	12	46	3.81	+ 1.36	1.39	0	11	16	0	14	nw.	Dr. Geo. McCowen.
Upper Lake	Lake	1,350	27	49.4	− 5.4	76	5	29	12†	45	2.87	+ 1.17	1.07	0	8	9	5	16	nw.	C. M. Hammond.
Vacaville	Solano	175	24	54.2	− 4.6	74	5	30	22	36	1.83	− 0.14	0.52	0	7	7	20	3	sw.	G. O. Coburn.
Valley Springs **	Calaveras	673	23	55.0	− 5.9	74	16	41	12†	....	1.58	− 0.31	0.43	0	9	11	9	10	nw.	Southern Pacific Co.
Visalia	Tulare	334	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Santa Fe Co.
Warner Springs	San Diego	3,165	4	49.7	.....	80	23	28	12	40	3.19	.....	2.07	11.0	8	19	8	3	.....	Mrs. F. S. Sandford.
Wasco	Kern	336	12	55.6	− 4.0	77	6†	35	20†	41	1.01	+ 0.50	0.45	0	4	11	7	12	.....	Santa Fe Co.
Watsonville	Santa Cruz	23	16	48.2	− 9.3	70	14†	22	12†	43	2.78	+ 1.71	1.05	0	8	8	18	4	w.	Spreckles Sugar Co.
Weaverville	Trinity	2,162	....	47.8	.....	77	1	27	5†	47	4.79	.....	1.66	T.	12	9	4	17	w.	U. S. Forest Service.
Weitchpec	Humboldt	1,700	2	45.8	.....	70	1	26	19	34	8.92	.....	2.78	0.5	17	11	9	10	s.	M. E. Lathrop.
Westley **	Stanislaus	90	23	62.2	− 1.8	76	17†	44	12	....	1.22	+ 0.55	0.42	0	6	17	0	13	.....	Southern Pacific Co.
Wheatland	Yuba	84	25	54.4	− 4.0	72	8	37	20	30	2.53	+ 1.13	0.90	0	7	8	7	15	se.	William Lumbard.
Willows	Glenn	136	33	55.5	− 4.8	79	1	35	12†	36	1.86	+ 0.66	0.87	0	7	13	13	4	n.	E. C. Mills.
Yosemite	Mariposa	3,945	8	44.9	.....	74	1†	21	12†	50	3.32	.....	1.00	21.0	11	5	11	14	s.	J. P. Kelley.

a, b, c, etc., indicate respectively, 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 11, California.*

Stations.	Watershed.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Oregon.																																
Klamath Agency	Klamath											.30																		.01	.40	0.71
Klamath Falls	....do										.43	.31		.15											.22	.05	.20			.07	.06	1.49
Lakeview	Pitt																															
Long Valley	....do																															
Merrill	Interior drainage.																															
Yonna	....do									.55	.21	.05		.15											.25		.25	T.		.30	.10	1.86
California.																																
Aguanga	Coast						.10			.11	.10	1.44	1.16															.03				2.94
Alameda	....do																													.36	.12	2.71
Alturas	Sacramento										.46	.13			.44		.20	.02	.01			.43			.16	.08	.30			.81		4.93
Angels Camp	San Joaquin										*	3.14					.23				.32						.43					
Angiola	....do																															
Antelope Valley	....do									1.07	.14	.38	.04															.17		.01	.07	1.88
Antioch	....do									.28		.04													.07		.04			.09		0.52
Aptos	Coast									.21	1.81	.67	.11														.38			.05		3.23
Arrowhead Springs	....do																															
Auburn	Sacramento										.64	.53	.11	.02															.21		.15	1.66
Avalon	Ocean				.03	.19				.49	.07	.49	.28														.01					1.56
Azusa	Coast																															
Bagdad	Desert																															0.00
Bakersfield	San Joaquin				.25					43	.06	.19	.12														.11					1.16
Barstow	Desert				T.	T.				.21																		T.				0.21
Bear River	San Joaquin																															
Bear Valley (1)	Sacramento				.18					.17	1.31	.70	.18				.35			T.	.25	T.			.72	.10	.65			2.93		7.54
Bear Valley (2)	San Joaquin				T.	.22				.14	T.		1.69		.16											.15		.21				2.57
Bear Valley Dam	Coast					.24						2.23															.03					2.50
Beaumont	....do					.37			.45	.45	1.20	.98	.31																			3.76
Beaumont (near)	....do					.64			.64	.49	1.32	.50	.34														.32					4.25
Belotta	San Joaquin					.15					.80	.30	.10														.50			.12	.08	2.05
Ben Lomond	Coast								T.		2.00	.99	.15												T.	.28			1.20		.07	4.69
Berkeley	....do							.01		.05	.48	.25													.02		.30			.36		1.47
Biggs	Sacramento										.70	.55	.13					.05									.30	.10		.15	.15	2.13
Bishop	Owens			.33			.05			.24																						0.62
Bishop Creek	....do					1.20			.80	.50	.60									.10	.10				.40							3.70
Blocksburg	Coast							.37	.13	1.00	.72	.72	.04						.04	.11	.12	.05	.45	.42	.55	.03	.34		.93	1.25	1.10	8.37
Blue Canon	Sacramento					.07					.85	1.20	.40	.10					T.		.10		T.		.72	.57	.40	.08		1.42	1.15	7.06
Blythe	Desert																															
Boulder Creek	Coast									.25	1.09	.85	.20																	1.10	.08	3.57
Branscomb	....do							.39	.16		.18	.95	.03								.05				.20	.50	.01		.70	2.60	2.28	8.14
Brawley	Desert					T.										T.																T.
Burney	Sacramento					T.						.30	T.	.10				.30				T.		T.	T.	.28		.29			1.46	.13	2.86
Butte Valley	....do																															
Cahuilla	Coast					.27	.03			.22	.07	2.26	.76	.30														.14				4.05
Calexico	Desert																															0.00
Caliente	San Joaquin																															
Calistoga	Coast										.02	.61													.07	.25	.14			.80	.25	2.14
Campbell	....do				.02			T.	.35	.18	.34	.42														T.		.11			.20	.10	1.72
Campo	....do					.32			.46	.20	.69	1.45	.15															.24					3.51
Camptonville (near)	Sacramento					.09				.14	2.24	1.40	.20	.02		T.	.15				.04					.79	.07	.60			1.75	.08	7.57
Cedarville	M't'n Lakes				T.						T.	.13	.02		.11				.14		.16				.15	.03	.14		.03	.19		1.10
Chester	Sacramento										.18	.10		.20			.14	.03			.20	.10	.05		.33		.20		.02	.72	.04	2.31
Chico	....do					T.					1.17	.19						.10			T.				.03		.35			.30		2.14
Chico (near)	....do										1.25	.42					.19				T.				.04		.27			.35	.12	2.64
China Flat	Coast							.52		T.	.74	.01	.01						.19	.06	T.	T.	.09	.04	.30	.38			2.04	1.16	1.21	6.75
Chino	....do			.05						1.32	.02	.58	.49						T.	T.	.10	.10	.50		.10	.50	.20			1.00	.70	6.00
Cisco	Sacramento										.40	2.00	.20	.20																		2.79
Claremont	Coast	.01			.01		T.	.01		1.27	.06	.88	.49		.05		.01															3.34
Cloverdale	....do							.20	.03	T.	.43	.71																				1.71
Coalinga	San Joaquin				.13				1.00	.39	.08	.03																	.08			5.16
Colfax	Sacramento										1.00	.73	.32	.33	T.										.31	.37	.44	.03		1.04	.59	3.04
Colgate	....do										.70	.33	.46	.25				.02			.01		T.		.14	.09	.27	T.		.48	.29	1.04
Colusa	....do				T.						.75	.07									T.			T.			.09	.06	T.	T.	.07	2.06
Corning	....do									.63	.46		.14				.11							T.		T.			.45	.06	.21	2.04
Corona	Coast				.17					.75	.57	.55															.18					4.38
Cuyamaca	....do					.35				.46	.75	1.91	.73																			1.37
Davisville	Sacramento				T.						.76	.28															.01			.26		8.11
Deer Creek	....do				.05	.10				.21	1.75	.64	.12	T.		.01	.05	.01	T.	T.	.15				.91	.53	.45			3.05	.08	
Del Monte	Coast																															
Delta	Sacramento									.50	.52	.25												.30		.20			3.50	.40	1.75	7.42
Denair	San Joaquin									1.00	.02																					1.02
De Sabla	Sacramento									.04	1.80	.93	.12						.35						.25		.40			1.38	.05	5.32
Descanso	Coast																															
Devils Canyon	....do					.19			.09	1.19	.41	1.65	.42														.17			.06		4.18
Dinuba	San Joaquin			.13						.93	.08	.07													.02		.36		.04			1.63
Dobbins	Sacramento									T.	1.14	.46	.28	T.				.03			.03				.21	.01	.29			.68	T.	3.13
Downieville	....do				T.	.05				T.	.75	.73	.06	.03	T.		.22	.09			.20				1.24	.35	.59			2.42	.30	7.03
Dudley	San Joaquin				T.						.85	.14									.01	.01					.14			T.		1.15
Dudleys	....do				.33				T.	.33	1.75	.07				.10	.01	T.	T.		.10				.19		.19		T.	.98		4.05
Dunlap (near)	....do				.75					.18	.55	1.03	.09	.25	.04		.07	.01							.16		.68			.20	.02	4.03
Dunnigan	Sacramento					.49						.44	.15	.04	.20												.04			.09	T.	1.45
Dunsmuir	....do											.36	.54	.62	.09									.13		.36	.11	.21		.30	1.82	.38	4.92
Durham	....do									.97	.22	.24										T.		.17		T.		.61		.29	T.	.10	2.60
East Park	....do									.28	.33	.21																		.40		.11	1.33
Edgewood	....do										.02	.28	.25	.04					.04	.30		.20		.32	.02	.03	.11			1.54	.04	3.19
Edison	San Joaquin				.05					.01	1.02	.42	.25	.93													.12					2.80
El Cajon	Coast					.25				.05	.50	.15	.95	.42														.10				2.42
Electra	San Joaquin									.12	1.23	.78	.01									.08			.22		.50			.51		3.45
Elsinore	Coast				T.	T.				T.	.40	.10	.78	.43													T.					1.80
Emigrant Gap	Sacramento				T.						.30	1.20	.40	T.				.15		T.	T.	.30	T.		1.90		T.		.10	1.20		5.55
Escondido	Coast									.95	.14	1.42	.45	.15																		3.11
Eureka	....do				.01			.30			.42	.78	.15						.11	.10	.14	.06	.04	.02	.01	.42	.40	.10		1.25	.75	.80	5.92
Fairmont	....do				.15				.25	.20	1.05	.10																.05					1.80
Farmington	San Joaquin				T.						.65	.12	.08															.27			.03		1.26
Felton	Coast									.08	1.90	.80	.12										.11					.34	.53			.12	3.99
Firebaugh	San Joaquin					.01				.18	.98	.04	.30										.02					.03	.22		T.		1.78
Folsom	Sacramento										.87	.84	.13	.05				.07							.05	T.	.44			.70	.12	3.27
Fordyce Dam	....do				.07					.07	.75		.18	.25	.06		.25	T.	.25	.06	.24	T.			.75	.38	.35			1.55	.60	6.87
Fort Bidwell	Mountain L'ks				T.						.01	.15	T.	T.	T.			T.	T.	T.		T.		T.	.01	T.	.15			.15	T.	0.47

TABLE 2.—*Daily precipitation for April, 1912. District No. 11*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
California—Contd.																																
Fort Bragg	Coast										1.22	.24											.42	.39					1.16	.29	.46	4.18
Fort Ross	do							.65	.01		.40	.23									.05			.42	.09		.32		.14	1.36	.12	3.79
Fouts Springs	Sacramento							.05			.38	.42											.05	.05				.10	1.52		.08	2.65
Fredalba	Coast					.25	.03			1.84	1.39	2.15	1.10																			6.76
Fresno	San Joaquin				.17				.01	.62	.39	.14	.03								.03				.02		.35			.10		1.86
Friant	do				.29	.08				.03	.90															.10	.08	.24		.08	.13	1.93
Galt	do										.90	.33	.07								T.				.45					.18	.15	2.08
Georgetown	do					.22			T.		1.08	1.18	.85	.13	T.						T.	.06			.11	.43	.64	.02	1.68		.36	6.76
Gilroy	Coast									.40	.62	.98	.14	.03											.01	.03	.14	.02		.52		2.89
Gilta	do							.32	.01		.18	.30	.03	.06					.07	.10				.40	.30	.01	.35		.67	2.86	1.70	7.36
Glendora	do																															
Glen Ranch	do				.07		.40			.85	.44	.90	.56	.02											T.	.05	.34			.18	.05	3.24
Glennville	San Joaquin			.02	.16	T.				.31	.63	1.05	.99		T.										.07	.22				.05		3.50
Glenwood	Coast									.27	1.50	1.00	.13														.28			.90		4.08
Gold Run	Sacramento					T.					.50	.80	.40	.50	T.							T.			.25	.65	.25	.10		1.65	1.00	6.10
Gonzales	Coast								.92	1.10	.33																					2.35
Grass Valley	Sacramento									.16	1.75	.64	.33	T.							.17				.47	.10	.50			1.81	.04	5.97
Greenland Ranch	Desert																															
Greenville	Sacramento				T.						.11	.10	.08	.04	T.	T.	.21	T.			T.	.10	T.	T.	.53	.06	.23	T.	.05	1.93	.33	3.77
Gridley	do										.42	.60	.23					.03							T.	.05	.34			.18	.05	1.90
Groveland	San Joaquin				.26				T.	.28	2.21	.82									.25				.10	.11	.18			1.55	.06	5.82
Guinda	Sacramento										.15	.10																				0.25
Hanford	San Joaquin																															
Head Dam	Sacramento									.03	1.37	.40	.18								.05				.25	.27	.39			1.00		3.94
Healdsburg	Coast							.15		.04	.58	.07	T.											.06	.13		.12		1.07	.22	.28	2.72
Hearst	do							.80		.20	.40	.20												.10	.30	.10			.20	2.30	.60	5.20
Heber	Desert									T.		T.																				T.
Helen Mine	Coast									1.37	.47	.37	.40											.23	.19	.23			3.48	3.67	.37	7.78
Hetch Hetchy	San Joaquin																															
Holcomb	Coast					.37	.20			.07	.05	.70	.30																			1.42
Hollister	do									.37	.54	.85	.12	.10								.04				.01	.06	.11		.09	.01	2.30
Hornbrook	Klamath										.06	.04	.02	.10	.09					.10	T.	T.	T.	T.	T.	T.	T.	T.	T.	.15	.10	0.66
Hot Springs	San Joaquin			T.	.11					1.18	.75	1.31	.83	.12	T.					T.	T.				.10		.54			.03		4.97
Hullville	Coast							.29	.02	.73	.56	.93	.02	T.	T.						T.		T.	.30	.23		.18		.01	2.54	.82	6.63
Idyllwild	do																															
Independence	Owens																															
Indio	Desert					.30						.05																				0.35
Inskip	Sacramento									T.		2.05	T.	T.		.12	.23	.43	T.		T.	T.		T.	.66		.31		T.	3.53	T.	7.33
Ione	San Joaquin										.60	.33	.10									.18			.11		.51			.20	.59	2.71
Jacksonville	do										1.62	.56	.31												.16		.17	.13		.37	.23	3.63
Jamestown	do				.03		.02			.00	1.60	.53	.20								.20				.15		.32			.60	.03	4.28
Jenny Lind	do										.60	.30	.05														.43			.20		1.58
Jolon	Coast				T.					1.44	.80	.44	.26	.04											T.		.04			.38		3.40
Julian	do					.25				.55	1.00	.95														.35						3.10
Kennedy Mine	San Joaquin																															‡3.27
Kennett	Sacramento									1.47	1.52	1.94	.02	.01									.01	.38	.14	.04	.06		.96	1.14	1.60	9.29
Kentfield	Coast								.04	.05	.61	.59												T.			.26			1.43	.39	3.37
Kernville	San Joaquin																															
King City	Coast									1.56	.69	.39																.05		.09		2.78
Knights Landing	Sacramento					.05					.28	.58	.12	T.											.05	.13				.08	.16	1.45
La Grange	do			.10					.22		1.31	.06														.22					.28	2.19
La Jolla	Coast					.22			.44	.22	*	*	3.73															.12					4.73
Lake Eleanor	San Joaquin																															
Lakeside	Coast																															
La Porte	do				T.					.05	.94	.88	.79	.06	T.	T.	.20	.05	T.	T.	T.	T.	.07	T.	.92	.16	.68		.01	2.77	.25	7.83
Lathrop	San Joaquin					T.				T.	.75	.14	.06												.02	.22				.05	T.	1.24
Laurel	Coast									.25	1.70	1.15	.15														.15			1.25		4.65
Laytonville	do																															
Le Grand	San Joaquin								.06	.51	.84	.14	.17								.16						.10			.21		2.19
Lemon Cove	do				.75							.69	.42	.36	.40										.09		.40					3.11
Lick Observatory	Coast								.07	.48	.80	.62									.05				.08	.01	.36		.23			2.70
Livermore	Coast																															
Lodi	San Joaquin				.03					1.10	.55	.09													.03	.41				.34		2.55
Lone Pine	Owens									.55																						0.55
Long Valley	Mount'n Lakes				T.					.02	.04	.01		.03	.04	.03		.07			T.				.12		.11			.91		1.38
Lordsburg	Coast									1.30	.20	.78	.48	.10																		2.86
Los Alamos	do				T.				.12	.08	.11	.42																		.12		0.85
Los Angeles	do				.07	T.			.20	.45	.48	.33	T.																	.01	.03	1.66
Los Banos	San Joaquin								.09	.84	.20	.49														.13	.10				.02	1.87
Los Gatos	Coast				T.				T.	.61	.90	.66													.03		.21			1.25		3.66
Los Molinos	Sacramento																															
Lowe Observatory	Coast						.27					2.20																.20				2.67
McCloud	Sacramento				T.			T.			.48	.48	T.	.05			T.		.03					.29	.45		.23	T.	.59	2.14	1.36	6.10
McDoel	Klamath									.40	.30			.50											.50					.25		1.95
Madeline	Mount'n Lakes					.03				T.	.27	.08	.13	.02	.05		T.	T.	.02	T.	T.	.25	T.	T.	.30	T.	.06	T.	T.	.30	.20	1.71
Magalia	Sacramento									1.81	.66	.56	.11				.21							.07	.40	.43			2.00	.55	.89	7.69
Mammoth Tank	Desert											.15																				0.15
Maricopa	San Joaquin				.03				.39	.15	.04													.02			.17					0.80
Mariposa	do				.12	.04			.03		.88	.70	.39												.33	.02	.11	.09		.40	.25	3.36
Marysville	Sacramento									.45	.63	.06					.16									.21			.28	.06		1.85
Mecca	Desert						T.																									T.
Melones	San Joaquin					.02				.02	1.04	.60	.37									T.			.12		.36	.10		.52	.20	3.35
Menlo Park	Coast								.09	.28	.55	.05												.05		.12			.26	.05	1.45
Merced	San Joaquin																															
Merced Falls	do			T.	T.				.01	1.12	.45	.40													T.	.02		.18	.07	.05	2.30
Mesa Grande	Coast									.38	.35	2.15		1.54													18					4.60
Middlewater	San Joaquin				.16					.90	.32	.03	.03														.42					1.86
Mill Creek (1)					.04				.01	.22	1.26	.34	.25								.15				.60	.07	.55			1.04	.12	4.65
Mill Creek (2)	Coast					.58		.43		1.00	.24	1.91	.31	.02													.28					4.77
Mills College	do									.06	.35	.50													.02		.37			.38		1.68
Milo	San Joaquin									.09		.36	.64	.70	.10	T.								.20		.56						2.65
Milton (near)	do				.08				.01	.19	.80	.01									.10				.15		.25			.30		1.89
Modesto	do										.75	.25																				1.00
Mojave	Desert											.50																				0.50
Mokelumne Hill	San Joaquin				T.				T.	.91	.41										.16			.15	.23	.42	.08		.10	.32		2.78
Mono Ranch	Coast				T.				.08	.63	1.49	.69																				2.89
Montague	Klamath										.66	.06	.02	.07	T.		T.		.07		.01	T.			.07	T.		.03	.35		.12	1.46
Monterey	Coast								.09	.48	.58	1.78	.17														.26			.05		3.41
Monterio	San Joaquin				.07	.05			.12	.13	.16		.50															.26			.02	1.31
Montgomery Creek	Sacramento										1.25	.70	.29	.39											.40		.65		.20	.70	1.19	5.77
Mount Tamalpais	Coast			.02				.07	.01	.22	.43	.19													.03	.03	.32		.14	.47	.22	2.15
Mount St. Helena	do								.30			1.57													.35	.22				1.60	.85	4.98

TABLE 2.—*Daily precipitation for March, 1912. District No. 11*—Continued.

Stations.	Watershed.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
California—Contd.																															
Napa City	Coast										.52	.30														.20				.70		1.72
Napa (S. H.)	do							T.			.18	.58													T.		.16			.36	.21	1.47
Needles	Desert									.10																						0.10
Nellie	Coast									*	1.65	*		*	6.25																	7.90
Nevada City	Sacramento										.14	1.32	.65	.33	T.						.04			T.	.52	.55	.33			1.47	.16	5.51
Newhall	Coast				.15				.84	.08	.68	.13																				1.88
Newman	San Joaquin									.30	.39	.06	.05	.02							T.				T.		.13			.04		0.99
North Bloomfield	Sacramento										1.42	.70													.85	.80			1.70		.27	5.74
North Fork	San Joaquin				.45						1.30	1.62	.20	.20		.30		.04							.15		.38	.23	.26		.30	5.43
North Lakeport	Coast							.70		.40	.45	.05												.10	.10	.10			.30	.93	.40	3.03
Oakdale	San Joaquin								T.		.52	.43									T.						.17					1.12
Oak Grove	Coast					.11			.06		.24	1.60	1.73														.02					3.76
Oakland	do							T.	T.	.05	.27	.17													.02		.25			.31		1.07
Oakville	do						T.				.10	.52	.10								.11									1.27	.23	2.33
Oceanside	do			T.	T.	.17			.58	.41	.38	.59	.10														.03			.10		2.36
Ojai Valley	do			T.	T.	.05				.70	.50	.66																		T.	T.	1.91
Orland	Sacramento				T.					.58	.28	.40					.06									.02	T.	.06	.05		.33	.02	.05	1.91
Orleans	Klamath			.01			.13	.30		.01	.44	.15	.01					.01		.08	.05			.17	.16	.15	.42	.01	.05	1.65	1.12	1.76	6.68
Oroville	Sacramento									.32	.43	.20															.95		.21	.19	.06	2.36
Ozeana	Coast										.20	.27	.10	.08																		0.65
Palermo	Sacramento										.25	.75	.10		.10														.20			1.40
Palm Springs	Desert					.05				.04		.03																				0.12
Parkfield	Coast									1.46	.91	.27															.29			.36		3.29
Pasadena	do				.07	.03			.03	1.08	.38	.91	.10																			2.62
Paso Robles	do									1.07	.33	.36	.13																	.82	.18	2.80
Peachland	do				T.			.38	.04	T.	.33	.37												.10	.10		.22		.01	.74	.11	2.40
Phoenix Dam	San Joaquin										.28					.68											.17	.14		.65		1.92
Pilot Creek	Sacramento					.08			T.	.28	2.18	.86	.29	.03			T.	T.			.24	T.			.76	.30	.70			2.38	.11	8.41
Pinchot	Coast				.15				.25	.20	.15	.10	.10													.50						1.45
Pine Crest	do									1.62	.22	1.04	.28															.02			.13	3.31
Placerville	Sacramento										.80	.60	.55												T.	.47	.43			1.02	.28	4.15
Point Lobos	Coast							.01	.04	.03	.48	.49												T.	.04		.19			.16		1.44
Point Loma	do	.01				.51	.11			.59	.42	.23	.44	.04										.01		.01						2.37
Point Reyes	do							.15	.03	.01	.14	.01		T.								T.		T.	.06	.01	.03		.22	.02	.03	0.71
Porterville	San Joaquin																															
Portulaca	do																															
Prattville	Sacramento				.01							T.	T.	T.	.15	T.	.22	.01	T.	T.	T.	T.	.01	.23	.13	.05	.07		.08	1.39	.15	2.50
Priest Valley	Coast									1.81	1.95	.86	.28	.10			.05											.14		.08	.20	5.47
Quincy	Sacramento										T.	.15					.30	.06			T.	T.		T.	.04					2.35	.30	3.20
Red Bluff	do									.61	.71	.14	.04				.27					.10		T.	.12	.03	.11		.35	.15	T.	2.63
Redding	do									*	*	3.00	.04				.33							.08			.09		.08	1.27	.07	4.96
Redlands	Coast				T.	.07	.10			.75	.22	.93	.45	.17														.16			T.	2.85
Reedley	San Joaquin			.12						.60	.35	.05															.37					1.49
Repressa	Sacramento										1.03	.79	.10	.11			.17									.56			.09	.16		3.51
Rialto (near)	Coast				.09	.14			.62	1.62	.63	1.98	.15														1.40			.12	.04	6.79
Rio Vista	Sacramento										.85	.10	T.												.04	T.	.05			.15	.04	1.23
Riverside	Coast					.04				.50	.09	1.02	.12														.02					1.79
Rocklin	Sacramento									1.00	.40	.05					.02							.05		.80	.05		.56	.02	.09	3.04
Rohnerville	Coast			T.				.27	T.	T.	.30	1.45	.36						.11		.24	.16	T.	.07	.48	T.	.52	T.	.27	1.58	.60	6.41
Sacramento	Sacramento									.28	.40	.31												.07			.18		.07	.38		1.69
St. Helena	Coast								T.	.12	.42													.08	.07	.15			.93	.18	.28	2.23
Salinas	do									.64	.68	1.16	.15														.22			.04		2.80
San Bernardino	do					.16			.07	.87	.22	1.48	.56														.10	.16			.05	3.67
San Diego	do					.15			.22	.82	.11	.65	.06														.04				.08	2.13
San Francisco	do							.03	.02	.06	.64	.16												T.	.05	.01	.16		.04	.06	.15	1.38
San Jacinto	do					.25				.66	.18	1.26	.67	.22																		3.24
San Jose	do				.01			T.	.19	.47	.52	.38													.10		.13		.01	.14		1.95
San Luis Obispo	do				.09				.16	.15	1.22	.23															.06			.36		2.27
San Mateo	do										.12	.65	.08																	.40	.06	1.31
San Miguel	do									1.21	.26	.23	.50	.26													.10					2.56
San Miguel Island	Ocean																															
Sanger	San Joaquin				.15	.11			.20	.40	.35	.08													.10		.38			.14		2.00
Santa Ana River	Coast					.35				1.20	.50	1.36	1.45		.40												.70					5.96
Santa Barbara	do									1.08	.10	.85	.06																		.03	2.12
Santa Clara	do				T.				.05	.24	.58	.61		T.											.01		.16			.18		1.83
Santa Cruz	do							T.	.17	.70	.60	.15												.03		.40			.12			2.17
Santa Margarita	do									.31	.51	1.43	.59																		.72	3.56
Santa Maria	do									.23	.09	.23															.05			.09		0.69
Santa Monica	do				.13					.56		.98	T.																			1.67
Santa Rosa	do								.10		.03	.58												.05	.02	.06	.20			.40	.10	1.54
Sausalito	do										.70	.65															.41			.50		2.26
Selma	San Joaquin			.14	.08					.76	.36	.09	.07														.30			.04		1.84
Seven Oaks	Coast																															‡2.23
Shasta	Sacramento									.22	.29	.43												.07	.26	.21			.72	1.24	1.83	5.27
Shingle Springs	San Joaquin										.95	.60	.85												.07		.53			.80	.35	4.15
Shrively	Coast											2.10	.31						.12	.11	.09	.14		.09	.61		.45		1.22	3.06	1.51	9.81
Sierra Madre	do				.03	.18			1.41	.15	1.01	1.10	.56	T.		T.											.09			.08		4.61
Sierraville	M't'n Lakes										.20									.30					.31					1.50		2.31
Sisquoc Ranch	Coast					T.				.36	*	.74	.30	.40																.12		1.92
Sisson	Sacramento									.05	.40	.20	.05					.05	.40	.10			.20	.15	.05			.05	1.95	.15	.33	4.13
Soledad	Coast																															
Sonora	San Joaquin									.47	1.66	.37									.08				.10		.40			.60		3.68
Southeast Farallon	Ocean							.15	.04		.46	.18		T.												.02	.03		.30	.03	.03	1.24
Spreckels	Coast								T.	.78	.53	1.05	.25														.15			.06		2.82
Springville	San Joaquin				.40					.60	.80		1.30				.80								.04		.58					4.52
Squirrel Inn	Coast					.12				1.55	1.02	3.11	.41	.10													T.	.20				6.51
Stanwood	Sacramento									T.	T.	.22	2.21												.37	.86		1.04	.06			4.76
Stirling City	do										.60	.60	.20													.30	T.	T.	T.	2.00	1.15	5.10
Stockton (S. H.)	San Joaquin				T.				T.	.17	.79	.10	.05												.03		.34			.06		1.54
Storey	do				.25						1.00	.11	.15															.18			.12	1.81
Suisun	Sacramento										.30	.64													.03		.18			.44	.08	1.67
Sulphur Banks	do										.52	.15													T.				T.	.62	.24	1.53
Summerdale	San Joaquin																															
Summit (1)	Sacramento										.80	.30	.10						.20						.20				.10	1.50	.30	3.50
Summit (2)	Coast					.22		.05		.74	.35	1.52	.58																			3.46
Susanville	M't'n Lakes														.10		.02		.02			.07	.03		.22		.11			1.01	.27	1.85
Tamarack	Sacramento				.08					.95	1.50	1.40	.75	T.	T.		.06	.08	T.	.06	.15				.65		.15			1.05	.12	7.00
Tehachapi	San Joaquin				.02	.10				.13	.33	.60	.23		.42																	1.83
Tehama	Sacramento											.58	.41													T.			.40		T.	1.39
Tejon Rancho	San Joaquin					.52	.05			.17		.06	.72	.03												.02						1.57
Three Rivers	do				.19	.21				.68	.76	.65	.41			T.									.13		.53	.06		.01		3.63

TABLE 2.—*Daily precipitation for April, 1912. District No. 11*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
California—Contd.																																
Towle	Sacramento				.08					.45	.70				1.55						T.				.34	.57	.47	.33		2.00	1.14	7.63
Tracy	San Joaquin										.30	.12	.20			.03									T.		.20	.20		.19		1.24
Tulare	do				.05	.16		T.		.66	.15	.28	.09												.01		.20			T.		1.60
Tustin (near)	Coast				.11	.04				.73	.08	.35	.51																			1.82
Ukiah	do							.42	.08	.01	.42	.80												.12	.12		.16	T.	.15	1.39	.14	3.81
Upper Lake	Sacramento							.13		T.	.45	1.06												.02	.04		.08		T.	1.07	.02	2.87
Upper Mattole	Coast							.05	.19		.02	.68	.51						.05	.04	.20	.05		.53	.31	.08	.51	.04	.15	6.35	4.10	13.86
Vacaville	Sacramento									.26	.52	.01								T.			T.		.10	T.			.47	.37	.10	1.83
Valley Springs	San Joaquin										.43	.35	.05								.10					.05	.35	.02		.19	.04	1.58
Visalia	do																															
Warner Springs	Coast					.11			.12	.24	.45	2.07	.08			.02											.19					3.19
Wasco	San Joaquin				T.				T.	.45	.26		.25														.05			T.		1.01
Watsonville	Coast								.25	1.05	.95	.03												.09		.31		.07			.03	2.78
Weaverville	do							T.	.11	.02	1.23	.65	T.						.03		.04	T.		.36	.09		.10	T.	.26	1.66	.22	4.79
Weitchpec	Klamath							.48	.09	T.	.07	.49	.07		.02				.16	.03	.11	.19	T.	.29	.52	.04	.58		.72	2.78	2.28	8.92
West Branch	Sacramento									T.	.97	.80	.20	.22			.05	T.			T.			T.	.45		.35			2.24	.22	5.50
Westley	San Joaquin					.05				.42	.40	.15															.15			.05		1.22
West Point	do					T.					.62	.64	.23	T.					T.						.34	.25	.52	.04		.83	.24	3.71
West Saticoy	Coast			.07					.25	.16	.62																					1.10
Wheatland	Sacramento					T.				.07	.90	.30	.10					.25			T.			T.	T.	T.	.41			.50		2.53
Willows	do							T.			.87	.21	.18	.05				.06						.01	T.		T.			.48		1.86
Yosemite	San Joaquin				.10					.04	1.00	.56				.20				.01	.01					.40	.03			.62	.35	3.32

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations for April, 1912. District No. 11, California.*

Date.	Burns, Oreg.		California.																							
			Alturas.		Barstow.		Branscomb.		Brawley.		Colusa.		Eureka.		Fresno.		Independence.		Los Angeles.		Mount Tamalpais.		Nevada City.		Porterville.		Red Bluff.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	64	26	70	20	83	48	70	32	.....	.....	69	40	51	46	76	48	.....	.....	64	48	55	49	71	30	.....	.....	71	43
2....	68	24	66	19	81	46	64	34	.....	.....	68	40	54	45	74	43	.....	.....	65	46	52	38	71	30	.....	.....	66	44
3....	66	28	57	29	81	46	65	33	.....	.....	67	40	55	46	71	43	.....	.....	65	48	48	39	64	37	.....	.....	61	46
4....	70	26	55	32	76	48	66	32	80	50	67	43	49	43	70	50	.....	.....	63	51	55	41	61	33	.....	.....	66	43
5....	68	30	61	17	74	46	62	28	73	55	74	42	53	38	67	45	.....	.....	62	53	59	41	70	30	.....	.....	75	45
6....	68	20	72	18	85	46	61	30	81	48	74	42	55	43	77	51	.....	.....	68	51	56	38	69	32	.....	.....	72	42
7....	69	34	65	38	90	45	52	37	85	49	75	46	51	44	74	45	.....	.....	64	51	43	38	70	36	.....	.....	59	44
8....	72	36	71	29	76	42	70	37	84	55	75	45	55	42	65	49	.....	.....	57	46	54	39	70	32	.....	.....	76	44
9....	56	32	71	24	60	45	64	35	73	54	.....	.....	49	46	55	46	.....	.....	56	46	53	37	60	36	.....	.....	63	46
10....	50	24	60	30	68	43	66	37	73	48	73	42	52	43	58	46	.....	.....	56	47	39	33	41	31	.....	.....	54	42
11....	56	34	45	19	60	42	41	31	64	50	56	42	46	42	58	42	.....	.....	50	44	44	32	42	30	.....	.....	52	42
12....	68	30	43	27	60	39	51	28	66	38	59	36	50	40	60	43	.....	.....	59	44	46	34	43	28	.....	.....	58	37
13....	64	29	47	26	68	36	56	30	70	45	60	40	56	41	63	37	.....	.....	59	45	46	35	54	30	.....	.....	56	41
14....	60	27	51	25	67	39	56	34	76	48	67	47	57	45	69	46	.....	.....	65	49	56	39	63	30	.....	.....	68	47
15....	54	30	59	22	80	42	60	35	82	53	71	43	55	40	73	49	.....	.....	66	48	59	46	67	30	.....	.....	72	46
16....	52	32	56	31	78	42	63	36	82	50	71	47	54	44	74	48	.....	.....	67	52	56	43	67	34	.....	.....	72	52
17....	42	22	54	30	75	45	61	37	83	55	71	47	52	47	72	46	.....	.....	65	52	56	44	66	35	.....	.....	73	49
18....	46	28	51	26	69	42	55	31	86	56	69	43	50	41	65	47	.....	.....	69	51	47	35	65	32	.....	.....	62	45
19....	45	32	45	20	70	40	54	31	77	56	65	40	48	38	62	42	.....	.....	65	51	45	34	55	26	.....	.....	61	40
20....	45	25	44	18	66	34	55	33	78	49	64	39	51	42	62	42	.....	.....	64	52	47	37	58	25	.....	.....	66	45
21....	44	26	46	26	75	33	51	30	83	48	65	41	51	40	68	38	.....	.....	67	50	48	36	57	28	.....	.....	62	44
22....	49	28	50	19	80	45	55	27	88	46	64	40	61	38	72	40	.....	.....	68	47	55	36	63	26	.....	.....	60	42
23....	52	29	58	29	89	43	56	33	87	62	68	47	59	49	77	42	.....	.....	76	52	47	40	66	36	.....	.....	64	52
24....	54	27	48	32	75	45	49	39	81	55	69	45	54	48	69	48	.....	.....	64	51	48	39	52	37	.....	.....	65	45
25....	50	33	52	30	80	46	51	30	82	53	70	40	54	44	71	44	.....	.....	67	51	54	39	60	27	.....	.....	66	41
26....	56	22	52	30	73	47	55	37	82	53	65	46	55	47	61	49	.....	.....	60	49	51	38	58	33	.....	.....	67	47
27....	63	26	62	25	80	45	53	34	86	48	72	45	53	48	70	47	.....	.....	67	47	52	39	64	30	.....	.....	67	45
28....	60	28	53	38	86	47	54	36	89	49	65	41	55	46	73	49	.....	.....	64	49	44	39	58	40	.....	.....	58	48
29....	62	24	49	31	78	45	54	37	85	49	67	49	53	48	66	52	.....	.....	63	50	45	40	47	38	.....	.....	63	48
30....	56	26	52	29	82	48	53	38	87	57	66	44	56	48	70	44	.....	.....	67	53	47	40	58	32	.....	.....	59	47
Mns..	57.6	27.9	55.5	26.3	75.5	43.3	57.4	33.4	80.1[c]	51.1[c]	67.8[a]	42.8[a]	53.1	43.7	68.1	45.4	.....	.....	63.7	49.1	50.2	38.6	60.3	31.8	.....	.....	64.5	44.7

Date.	California.																									
	Redlands.		Sacramento.		San Diego.		San Francisco.		San Jose.		San Luis Obispo.		Santa Barbara.		Santa Rosa.		Sisson.		Stockton.		Summit.		Susanville.		Yosemite.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	70	47	68	44	61	46	55	46	65	45	62	48	64	44	60	44	65	35	71	43	46	20	64	30	74	24
2.....	75	42	63	42	61	52	56	45	57	44	56	43	62	47	60	34	59	39	63	40	42	30	64	32	72	22
3.....	70	43	63	44	61	54	60	48	64	40	62	36	60	44	63	40	52	26	64	44	40	34	62	35	72	28
4.....	63	46	67	47	60	53	58	48	66	47	60	46	62	48	67	38	55	25	68	47	35	30	57	37	58	37
5.....	56	48	72	43	61	53	61	46	68	44	64	46	63	49	71	33	59	29	73	42	42	34	58	29	65	28
6.....	70	48	68	46	64	51	57	48	69	38	66	43	66	45	61	35	60	39	73	43	47	30	67	29	74	24
7.....	75	42	62	44	58	54	57	48	66	40	61	48	63	50	56	42	48	26	66	42	42	35	67	39	72	24
8.....	65	49	72	46	58	48	61	48	59	42	58	42	54	45	67	42	65	35	69	45	48	32	68	35	72	25
9.....	54	40	58	46	58	46	56	48	56	47	56	45	58	47	62	44	66	33	62	52	38	30	64	37	62	34
10.....	57	43	52	43	59	50	51	44	54	43	52	45	54	46	53	44	42	30	60	45	38	24	64	33	39	29
11.....	48	40	52	42	54	46	53	44	52	40	52	41	[b]53	42	54	38	36	29	61	40	28	24	49	31	49	24
12.....	53	36	59	36	57	47	54	44	58	38	55	34	63	44	60	29	42	29	60	38	40	22	48	27	52	21
13.....	58	37	60	40	59	45	59	45	61	38	56	34	56	40	59	36	40	30	63	40	48	22	49	27	54	21
14.....	68	44	67	47	60	47	66	49	67	45	65	46	63	45	69	40	52	30	67	42	47	23	54	34	55	26
15.....	70	40	72	46	63	48	61	50	69	40	66	46	64	45	69	36	60	37	71	45	47	22	60	35	65	29
16.....	67	42	70	47	61	52	58	49	66	39	64	43	65	47	72	35	55	35	71	45	38	24	56	34	65	30
17.....	64	48	72	48	63	56	65	49	67	40	62	41	64	47	75	37	55	30	72	46	46	25	54	32	65	28
18.....	69	45	64	46	64	55	57	48	61	42	62	46	70	52	68	37	40	27	64	47	30	20	45	31	61	28
19.....	61	49	63	43	62	56	58	46	60	41	54	40	67	48	72	42	44	29	64	40	34	22	45	25	48	26
20.....	65	41	62	40	62	49	55	48	60	40	57	42	68	45	66	38	46	29	64	41	38	20	49	22	50	23
21.....	67	39	64	42	64	50	55	46	60	35	59	42	67	45	63	30	45	25	64	40	32	22	48	25	58	22
22.....	74	38	65	42	65	48	60	45	[a]66	33	66	40	68	45	63	30	45	33	68	38	44	25	52	29	67	24
23.....	81	48	69	47	67	50	63	49	71	38	67	42	73	46	60	42	45	33	72	44	46	26	58	27	72	26
24.....	67	42	64	47	62	57	56	50	63	45	62	44	72	51	65	44	50	32	65	48	34	22	52	35	64	33
25.....	70	45	67	43	64	53	59	47	66	37	62	46	72	43	68	34	52	34	68	43	49	27	55	28	64	26
26.....	62	42	62	47	60	51	61	50	63	47	56	43	65	47	68	43	54	28	63	48	44	27	52	35	55	28
27.....	68	40	65	44	63	50	56	48	62	40	58	42	64	46	65	38	58	38	66	44	46	23	64	29	65	25
28.....	71	42	57	48	62	51	57	49	61	49	58	48	60	45	55	46	44	34	69	46	34	22	57	41	73	44
29.....	66	46	60	49	62	55	58	50	63	46	60	49	58	45	58	50	50	34	64	49	32	28	48	33	65	33
30.....	71	50	64	45	64	55	60	49	67	40	63	40	65	44	59	48	41	33	68	43	34	29	52	32	68	27
Mns.....	65.8	43.4	64.1	44.5	61.3	50.9	58.1	47.5	62.9	41.4	60.0	43.0	63.4	45.9	63.6	39.0	50.8	31.5	66.4	43.7	40.3	25.8	56.1	31.6	62.5	27.3

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

CLIMATOLOGICAL DATA FOR APRIL, 1912.

DISTRICT No. 12, COLUMBIA VALLEY.

EDWARD A. BEALS, District Editor.

With few exceptions the favorable conditions in March continued throughout April. The rains that fell were frequent and mostly gentle and consequently the soil was kept in excellent condition as regards moisture. The cool weather retarded growth so that vegetation was not far enough advanced to be injured by the few heavy frosts that occurred. The cool weather also prevented the snow in the foothills and mountains from melting as rapidly as usual, and the Columbia River maintained a stage of a foot or more below normal. This incident is considered unfavorable by those affected by spring floods, the crests of which are generally lower when the April run-off is large, for in such cases there is less snow remaining in the mountains to melt when the hotter weather of May arrives. In Idaho late snows caused a heavy loss in lambs, but otherwise stock was in good condition at the end of the month. Wheat has rooted well and the outlook for fruit is the best for a number of years. Scarcely any interruption to railway traffic took place on account of stress of weather, and outdoor work made satisfactory progress.

TEMPERATURE.

Temperatures throughout the month were very equable and there were no marked periods of extreme heat or cold. The average daily temperatures were unseasonably cool in western Oregon and in extreme eastern Idaho. In Montana and portions of Idaho the weather was slightly warmer than usual. The average temperature as determined from the records of 274 stations was 46.2°, or 1.2° below the normal. The highest daily temperatures were generally recorded during the first decade, but monthly minimum temperatures did not occur on any definable group of dates. The highest mean temperature was 57.1° at Huntington, Oreg., and the lowest 29.6° at Moran, Wyo. The highest daily temperature was 90° at Huntington on the 9th, and the lowest daily temperature −8° at Moran on the 20th.

PRECIPITATION.

In northwestern Oregon and western Washington the precipitation was from one-half to 2 inches below the normal. Elsewhere in the district it was mainly above normal. In Idaho it was the greatest on record for April, and there was also a pronounced excess in Montana. In Washington, although light, the rainfall was well distributed, and there was scarcely any locality with a period of as much as 6 days without some rain. The average precipitation for the district as determined from 379 stations was 2.46 inches, 0.16 inch above the normal. The greatest monthly amount recorded was 12.34 inches at Happy Home, Oreg., and the least monthly amount 0.10 inch at Lost Creek, Wash. The largest 24-hour rainfall was 3.84 inches at Happy Home on the 29th. The snowfall in the mountains was unusually heavy for April, but at low elevations the precipitation was chiefly in the form of rain. Snow in the higher mountains of Idaho melted very little during the month, but in Montana there was a great deal of run-off caused by the warm days early in the month. Uniformly cool weather retarded the melting in the Cascade Mountains where there was considerable snow on the passes and deep snow on the summits at the end of April.

THE RIVERS.

The Willamette River was below the normal for the month and its stages were lower than those for March excepting at Portland, which averaged about 2.5 feet higher than the preceding month. The higher stages at Portland were caused by the rising water in the Columbia. The highest stage at Portland was 8.6 feet on the 30th, and the lowest stage was 5 on the 1st. The highest and lowest water at Salem and Eugene differed very little from their respective means.

The Columbia River rose steadily during the month, but averaged about 2 feet below the normal for previous years. Its stages were about 3 to 5 feet above those for the preceding month. The highest water at Vancouver, Umatilla, and Wenatchee occurred on the 30th and reached 8.2 feet, 9.3 feet, and 11.8 feet, respectively. The lowest at these stations was 4, 4, and 4.5 feet, respectively, on the 1st of the month. As temperatures were slightly below normal and the precipitation slightly above, the rise in the Columbia is considered seasonal.

The Snake River was normal at Lewiston and slightly above normal at Riparia and Weiser. Its stages averaged about 3 feet higher than the preceding month. The highest water occurred generally from the 11th to the 13th, and the lowest water on the 1st and 2d. The Snake River was rising slowly at Lewiston and Riparia and almost on a stand at Weiser during the latter part of the month.

MISCELLANEOUS PHENOMENA.

The heavy frosts that occurred during the month did very little if any damage to the fruit and berry blossoms according to reports from various localities. Thunderstorms occurred in southern and eastern Oregon and eastern Washington on the 9th, and were quite general throughout the eastern part of the district on the 29th. Hail was of rather frequent occurrence, and some damage was done to early fruit in parts of the Payette Valley on the 11th. Maximum velocities of wind that reached 40 miles or more per hour were reported at Tatoosh Island, North Head, and Boise.

LOWER POWDER VALLEY PROJECT, BAKER COUNTY, OREG.

By JOHN H. LEWIS, State Engineer.

An important step was taken by the Desert Land Board on September 27, looking to the reclamation of 73,000 acres in Lower Powder Valley, about 14 miles northeast of Baker, in Baker County, Oreg. This project, if constructed, will be one of the most complete in the State if not in the entire West, as almost the entire system will be built of concrete and steel. A final contract has been executed by the Desert Land Board which will become binding on the State when a bond for $87,000 is put up and construction work commenced within 18 months. The estimated cost is $3,961,129 and the lien allowed $4,388,000. This, when distributed on 43,915 acres of Carey Act land, will mean a cost of $100 per acre. This land, however, is scattered among a considerable area of patented land which is now under cultivation and demonstrates the value of the country for agricultural purposes.

The principal source of water supply will be obtained by the construction of a 110-foot dam at the lower end of Thief Valley, about 10 miles upstream from the land to be irrigated. This dam will store 65,000 acre-feet of water, creating a lake which will come within a few feet of flooding the O. W. R. & N. track where it crosses Powder River. The direct flow of the stream will be used as long as floods continue. A 520 second-foot capacity canal will lead from this reservoir to the land, where it will divide, one branch crossing the river channel in an inverted steel and concrete syphon, and the two branches will cover a total of 43,915 acres.

The lands on the north side of the river above the North Canal from Thief Valley will be watered by storage in Balm Creek, supplied by a 10-mile feed canal of 313 second-feet capacity from Eagle Creek, with supplementary storage in West Eagle Reservoir. The Balm Creek Dam will be 150 feet in height and store 16,200 acre-feet. The West Eagle Dam will be built as high as necessary to furnish the required water, and not to exceed 130 feet in height, storing 14,700 acre-feet.

With a duty of 1.9 acre-feet on the land, the water supply, from the available information, appears sufficient for the irrigation of 59,000 acres of irrigable land. Detailed specifications are provided calling for the use of concrete and steel construction almost throughout, and the distributing system, where canals are not on grade, will be built of reenforced concrete pipe. This permanent construction will be carried to within one-fourth mile of each 160-acre tract to be watered, from which point wooden flumes or drops may be used in delivering water to the lands in question.

Great stress has been laid by the State on the collection of thorough engineering data and information. This is not only necessary for the settlers' protection, but with an expensive project of this character is absolutely essential to the successful financing of the project.

TABLE 1.—*Climatological data for April, 1912. District No. 12, Columbia Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Montana.																			
Anaconda	Deer Lodge	5,300	10	41.1[a]	+ 0.2	68[a]	8	17[a]	6	36[a]	1.08	+ 0.33	0.54	6.0	10	5	10	15	C. D. Demond.
Butte	Silver Bow	5,716	17	41.0	+ 0.4	67	9	19	6	34	0.64	+ 0.51	0.30	1.0	6	6	5	19	sw.	J. R. Wharton.
Columbia Falls	Flathead	3,100	16	44.0	+ 1.2	76	10	18	6	46	1.78	+ 0.73	0.59	T.	7	11	3	16	se.	J. M. Grist.
Como	Ravalli	3,700	3	46.0	.....	79	8	28	28	39	1.19	.....	0.43	0	9	14	2	14	.....	Hiram Platt.
East Anaconda	Deer Lodge	5,500	6	39.7	.....	66	8	19	6	39	1.20	.....	0.40	0.4	14	5	10	15	sw.	C. D. Demond.
Fortine	Lincoln	2,975	6	43.2	.....	72	10	16	6	47	0.99	.....	0.57	.....	4	3	13	14	w.	Mike Petery.
Hamilton	Ravalli	3,575	9	46.5	− 0.8	75	8†	25	6	42	2.38	+ 1.48	0.72	T.	9	8	9	13	w.	Hamilton Chamber of Commerce.
Hat Creek	Powell	6,000	2	.....	.....	.....	.....	.....	.....	.....	2.06	.....	0.90	12.9	8	1	9	20	w.	M. K. Landreth.
Haugan	Missoula	3,150	.....	42.4	.....	72	9	18	6	47	1.67	.....	0.60	T.	9	10	9	11	sw.	U. S. Forest Service.
Heron	Sanders	2,261	.....	47.4	.....	76	9	27	1†	48	1.95	.....	0.43	0	10	16	3	11	sw.	E. Knott.
Kalispell	Flathead	2,965	13	45.8	+ 3.0	73	10	24	6	38	0.61	− 0.45	0.40	T.	9	7	13	5	w.	U. S. Weather Bureau.
Libby	Lincoln	2,055	2	46.2	.....	76	9	20	6†	51	0.75	.....	0.23	.....	4	6	16	8	.....	U. S. Forest Service.
Lost Creek	Deer Lodge	5,200	2	.....	.....	.....	.....	.....	.....	.....	1.11	.....	0.50	7.0	5	11	10	9	w.	Frank Henault.
Missoula	Missoula	3,225	32	45.6	+ 0.7	76	9	20	6	46	2.02	+ 1.05	1.39	.....	10	.....	.....	.....	.....	U. S. Weather Bureau.
Ophir	Powell	6,800	3	.....	.....	.....	.....	.....	.....	.....	1.88	.....	0.30	7.0	10	8	11	11	w.	E. S. Wilton.
Ovando	....do	4,207	12	39.6	+ 0.6	65	8	13	7	49	1.85	+ 0.81	0.60	1.0	13	0	1	29	w.	S. B. Muchmore.
Phillipsburg	Granite	5,275	8	42.2[a]	.....	73[a]	8†	18[a]	8	55	1.05	.....	0.50	3.0	5	2[a]	2[a]	9[a]	.....	G. T. Bramble.
Plains	Sanders	2,475	13	46.2	+ 1.3	73	7	28	26	42	T.	− 0.47	T.	.....	0	22	1	7	sw.	M. H. Pierce.
Pleasant Valley	Flathead	3,500	4	41.2[a]	.....	70[a]	7	18[a]	6	46	0.96	.....	0.22	1.0	9	11[b]	0[b]	17[b]	w.	A. D. Stillman.
Polson	....do	2,920	4	45.9	.....	68	2†	29	28†	38	1.04	.....	0.51	0	6	.....	.....	.....	.....	F. P. Brown.
Proctor	....do	2,800	7	46.8	.....	73	9	27	7†	43	0.15	.....	0.06	.....	4	10	4	16	.....	C. E. Proctor.
St. Ignatius	Missoula	2,700	6	47.1	.....	77	9	22	6	47	0.69	.....	0.18	0	10	12	4	14	w.	U. S. Reclamation Service.
Saltese	....do	3,600	7	.....	.....	.....	.....	.....	.....	.....	1.62	.....	0.74	0	5	23	0	7	w.	E. K. Tarbox.
Stevensville	Ravalli	.....	.....	44.6	.....	74	8†	21	6	43	0.61	.....	0.32	3.0	3	15	4	11	s.	University Orchard Co.
Thompson Falls	Sanders	2,462	.....	47.9	.....	78	9	23	6	46	1.54	.....	0.55	.....	8	9	10	11	w.	U. S. Forest Service.
Trout Creek	....do	2,375	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jas. Hylent.
Willow Glen Stock Farm	Deer Lodge	5,064	1	42.0	.....	70	8†	19	26	46	.....	.....	.....	.....	.....	14	5	11	sw.	G. E. Luce.
Wyoming.																			
Afton	Uinta	6,200	8	34.4	.....	59	28	14	20	37	0.91	.....	0.23	5.5	11	16	2	12	.....	A. V. Call.
Alta	....do	7,000	2	32.7	.....	63	9	− 7	20	43	1.82	.....	0.30	18.7	9	7	8	15	s.	Mrs. Lucy Brown.
Bechler River	Yellowstone Park.	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.34	.....	1.01	36.0	25	8	12	10	s.	U. S. Army.
Bedford	Uinta	5,900	12	32.9[j]	− 3.8	53[j]	9	9[j]	1	42[j]	0.81	− 0.58	0.25	7.6	8	9[b]	4[b]	9[b]	w.	C. G. Heiner.
Moran	....do	.....	.....	29.6	.....	50	9	− 8	20	41	1.88	.....	0.32	13.5	12	3	11	16	.....	U. S. Reclamation Service.
Snake River	Yellowstone Park.	7,000	6	30.6	.....	57	8	− 2	20	47	3.55	.....	0.80	36.0	11	9	8	13	w.	U. S. Army.
Nevada.																			
San Jacinto	Elko	.....	7	48.1[a]	.....	72	3	21[a]	2	43[a]	1.15	.....	0.40	11.5	3	21	0	9	s.	Mose Jones.
Utah.																			
Standrod	Boxelder	.....	7	39.8	.....	66	8	13	20	31	1.71	.....	0.47	12.5	11	11	7	12	sw.	T. B. Jones.
Idaho.																			
Albion	Cassia	4,650	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. E. Bocock.
Almo	....do	.....	3	.....	.....	.....	.....	.....	.....	.....	2.00	.....	0.43	1.8	9	18	4	8	s.	Wm. D. Cahoon.
Alpha	Boise	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. W. King.
American Falls	Oneida	4,341	21	40.2	− 4.9	74	8†	10[i]	20	56[a]	2.09	+ 0.73	0.38	5.1	7	13	15	2	n.	Geo. Stoll.
Arrow Rock	Boise	3,100	.....	49.0	.....	79	8†	28	15	41	2.40	.....	0.45	0.5	15	13	7	10	e.	U. S. Reclamation Service.
Blackfoot	Bingham	4,503	16	42.8	− 2.3	73	9	20	6†	46	1.17	+ 0.29	0.42	.....	9	8	18	4	sw.	E. A. Dowd.
Blackfoot Dam	Bannock	6,200	3	30.1	.....	59	9	− 5	20	43	1.62	.....	0.60	10.5	10	10	6	14	s.	S. C. Waddell.
Bocks Ranch	Elmore	3,500	3	.....	.....	.....	.....	.....	.....	.....	2.53	.....	0.42	1.6	14	.....	.....	.....	.....	Wm. Bock.
Bogus Creek	Boise	4,200	4	.....	.....	.....	.....	.....	.....	.....	6.03	.....	1.32	20.0	17	6	20	4	.....	F. P. Ingraham.
Boise	Ada	2,739	27	48.2	− 1.9	76	8	32	14	33	3.34	+ 2.16	1.26	0.9	13	7	5	18	nw.	U. S. Weather Bureau.
Bonners Ferry	Bonner	1,850	5	45.2	.....	71	7	20	5	44	1.37	.....	0.50	0	6	6	21	3	sw.	W. H. Heideman.
Boulder Mine	Boise	4,800	3	.....	.....	.....	.....	.....	.....	.....	5.02	.....	0.84	18.2	15	10	8	12	.....	P. Moriarty.
Buhl	Twin Falls	3,800	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Thos. H. Holmes.
Caldwell	Canyon	2,372	8	49.4	.....	81	8†	24	6	47	1.96	.....	0.50	0	12	4	15	11	w.	Wm. J. Boone.
Camas	Fremont	4,815	4	36.5[c]	.....	70[c]	8	2[c]	26	55[c]	0.82	.....	0.32	0	1	.....	.....	.....	sw.	Mrs. Ednah Faulkner.
Cambridge	Washington	2,651	16	47.6	− 1.8	73	2	25	1	45	1.52	+ 0.22	0.58	0	7	.....	.....	.....	.....	C. H. Shepherd.
Cedar Creek Dam	Twin Falls	5,220	2	.....	.....	.....	.....	.....	.....	.....	3.40	.....	2.00	24.0	9	9	10	11	sw.	Robert Hoffman.
Chesterfield	Bannock	5,424	16	37.8	− 3.3	62	24	13	20	39	0.91	− 0.04	0.24	9.0	8	11	10	9	nw.	C. S. West.
Clarks Fork	Bonner	2,084	.....	47.4	.....	71	8	28	6	42	1.48	.....	0.48	0	9	16	5	9	w.	Wm. Potter.
Clyde	Custer	6,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. L. Sutcliffe.
Council	Adams	3,059	.....	46.2	.....	77	9	29	6†	40	3.62	.....	0.86	0	15	5	16	9	n.	F. L. Featherston.
Culdesac	Nez Perce	1,520	4	48.6	.....	75	3	30	8†	42	3.02	.....	0.87	0	4	12	14	4	.....	R. R. Richmond.
Deary	Latah	2,854	.....	43.3	.....	77	9	24	6	48	2.70	.....	0.65	3.0	9	6	17	7	sw.	W. J. Davis.
Dent	Clearwater	1,350	6	49.4	.....	83	9	24	6	52	2.80	.....	0.61	0	12	6	12	12	.....	Emil Schuessler.
Driggs	Fremont	6,097	5	32.2	.....	56	9	− 7	20	38	1.08	.....	0.28	12.0	6	9	6	15	sw.	W. H. Durrant.
Emmett	Canyon	2,350	5	49.6	.....	80	9†	30	5	38	2.71	.....	0.67	0	14	7	15	8	ne.	U. S. Forest Service.
Forney	Lemhi	6,000	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. B. Merritt.
Garden Valley	Boise	3,600	4	.....	.....	.....	.....	.....	.....	.....	2.77	.....	0.57	.....	10	4	23	3	.....	Mrs. Gertrude M. Ross.
Garnet	Elmore	2,575	13	52.9	− 1.3	84	9	30	14	45	1.50	+ 0.72	0.90	0	2	14	12	4	w.	A. A. Kenison.
Glenns Ferry	....do	2,569	4	50.9	.....	82	8	24	14	48	1.60	.....	0.22	0	13	16	4	10	.....	I. E. Perkins.
Gooding	Lincoln	3,572	3	46.4	.....	78	8†	22	14	45	0.96	.....	0.17	4.0	12	12	8	10	w.	John Krall, jr.
Grand Forks	Shoshone	3,000	3	41.2	.....	64	2	16	6	43	3.37	.....	0.68	0.5	14	6	12	12	w.	J. E. Keach.
Grandview	Owyhee	.....	3	48.4	.....	80	8	24	1†	47	1.68	.....	0.43	0	11	10	7	13	nw.	N. G. Massey.
Grimes Pass	Boise	5,200	3	.....	.....	.....	.....	.....	.....	.....	3.45	.....	0.66	12.0	16	.....	.....	.....	.....	Jos. M. Clarke.
Guffey	Owyhee	2,381	4	51.5	.....	82	9	29	6†	48	2.91	.....	0.91	T.	19	9	14	7	e.	Fred Perry.
Hailey	Blaine	5,347	10	41.2	− 1.4	68	8	20	6†	34	2.33	+ 1.29	0.58	3.0	14	9	9	12	sw.	U. S. Forest Service.
Hollister	Twin Falls	4,550	.....	43.4	.....	72	8	22	21	35	1.99	.....	0.55	8.5	11	7	19	4	w.	J. W. Bouten.
Hotspring	Owyhee	2,752	7	51.0	.....	83	9	30	1†	41	2.50	.....	0.80	2.0	10	8	13	9	.....	J. M. Waterhouse.
Idaho City	Boise	4,000	11	.....	.....	.....	.....	.....	.....	.....	3.47	+ 2.06	1.53	8.0	7	.....	.....	.....	.....	Mrs. Emma Hammer.
Idaho Falls	Bonneville	4,742	17	41.0	− 2.9	70	9	22	6	42	1.94	+ 0.87	0.77	5.0	12	13	7	10	.....	Dr. T. M. Bridges.
Indian Valley	Adams	2,999	3	.....	.....	.....	.....	.....	.....	.....	1.96	.....	0.66	T.	10	11	3	16	s.	A. M. Henke.
Irwin	Bonneville	6,500	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Eva Johnston.
Kellogg	Shoshone	2,305	8	45.0	.....	76	9	22	6†	47	2.79	.....	0.79	0	12	9	1	20	.....	W. McM. Huff.
Kirkham	Boise	4,200	3	.....	.....	.....	.....	.....	.....	.....	1.45	.....	0.75	1.0	8	7	15	8	e.	Mrs. Josie B. West.
Kooskia	Idaho	1,261	4	50.6	.....	82	9	26	7	52	5.20	.....	1.10	0	11	5	5	20	.....	U. S. Forest Service.
Lakeview	Bonner	2,250	15	46.2	+ 0.6	70	9	26	6	39	1.36	− 0.27	0.28	1.0	11	6	9	15	sw.	E. D. Faust.
Landore	Adams	5,300	8	37.0	.....	61	9	16	1	38	4.01	.....	1.05	16.6	17	9	10	11	.....	Mrs. Emma L. Brown.
Leadore	Lemhi	.....	.....	39.4	.....	64	7	11	20	34	0.66	.....	0.15	.....	10	9	7	14	e.	Loy H. Lee.
Lewiston	Nez Perce	757	12	51.6	− 1.5	77	9	31	6	39	1.66	+ 0.53	0.38	0	11	5	6	19	e.	U. S. Weather Bureau.
Little Camas	Elmore	5,000	3	.....	.....	.....	.....	.....	.....	.....	2.36	.....	0.40	9.0	13	1	12	17	w.	Solon McCoy.
Loon Creek	Custer	6,000	3	35.6	.....	62	8	13	6	40	3.02	.....	0.64	19.3	17	5	6	19	.....	Mrs. Mary Williams.
Mackay	....do	5,897	5	38.9[e]	.....	64[e]	3	15[e]	22	37[e]	.....	.....	0.50	.....	.....	.....	.....	.....	.....	U. S. Forest Service.
Meridian	Ada	2,657	2	49.2	.....	80	8†	26	6	43	2.55	.....	0.64	0.1	13	6	10	14	nw.	A. W. Garrett.
Mesa	Adams	3,275	2	46.8	.....	68	14†	21	13†	47	1.43	.....	0.30	2.0	8	.....	.....	.....	n.	I. S. Carter.

TABLE 1.—*Climatological data for April, 1912. District No. 12*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Idaho—Continued.																				
Middle Fork	Idaho	1,397	2	49.4[b]	.....	78[b]	2	31[b]	6	41[b]	6.05	.....	0.95	0	14	.....	.....	.....	.....	Jos. McGhee.
Milner	Twin Falls	4,110	8	44.2	.....	72	8	19	21	37	2.03	.....	0.53	8.5	11	10	12	8	w.	James K. Young.
Moscow	Latah	2,748	20	45.1	− 0.9	74	10	29	6	35	1.77	+ 0.33	0.45	1.5	10	10	7	13	se.	University of Idaho.
Mountainhome	Elmore	3,150	7	47.0	.....	80	9	20	6	47	1.76	.....	0.44	2.0	10	9	6	15	se.	Mrs. Ellen Manion.
Murtaugh	Twin Falls	.....	6	42.8[c]	.....	73[c]	9	20[c]	21	45[c]	2.06	.....	0.85	0.8	5	.....	.....	.....	w.	J. E. Steinour.
New Meadows	Adams	3,950	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. G. Dunn.
Nezperce	Lewis	3,082	3	45.0	.....	73	10†	26	6	38	2.62	.....	0.60	9.0	10	12	3	15	.....	P. Mitchell.
Oakley	Cassia	4,700	19	43.4	− 3.4	73	8	16	20	42	1.95	+ 1.03	0.70	9.0	5	9	20	1	s.	John Adams.
O'Hara Bar	Idaho	1,557	2	47.8[c]	.....	74[c]	8	26[c]	6	43[c]	3.58	.....	.....	0	.....	.....	.....	.....	w.	J. D. Agnew.
Orofino	Clearwater	1,027	8	48.5	.....	82	9	26	1†	51	4.41	.....	0.80	0	14	7	17	6	.....	Geo. Altenseder.
Payette	Canyon	2,159	22	49.0	− 2.5	80	9	25	6†	49	1.62	+ 0.81	0.43	T.	10	5	12	13	n.	E. F. Allen.
Pebble	Bannock	5,277	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Fannie Say.
Pierson	Custer	7,000	2	31.8	.....	60	1	4	6	51	2.23	.....	0.62	21.0	7	15	2	13	s.	D. P. Clarke.
Pine	Elmore	4,100	3	.....	.....	.....	.....	.....	.....	.....	2.78	.....	0.67	2.5	10	9	5	16	.....	Mrs. Jennie Potter.
Pleasant Valley	Ada	3,000	5	46.7	.....	78	8	26	6	45	2.61	.....	0.79	0.8	16	11	6	13	se.	C. E. Friedrich.
Pocatello	Bannock	4,483	13	43.2	− 3.6	69	8	17	20	36	2.20	+ 0.18	0.48	8.0	14	5	12	13	se.	U. S. Weather Bureau.
Pocatello Nursery	....do	5,397	5	38.4[c]	.....	66[c]	9	6[c]	20	43[c]	.....	.....	.....	.....	.....	.....	.....	.....	sw.	P. T. Wrensted.
Poplar	Bonneville	5,500	2	38.6	.....	63	9	15	1	35	2.15	.....	0.46	15.2	13	7	15	8	sw.	C. M. Lawrence.
Porthill	Bonner	1,665	23	46.7	+ 1.2	69	9	23	6	39	0.78	− 0.24	0.28	0	7	16	11	3	.....	H. A. French.
Powers' Ranch	Boise	4,300	3	.....	.....	.....	.....	.....	.....	.....	4.23	.....	1.60	5.0	13	14	0	16	.....	Mrs. Mary French.
Priest River Experiment Station No. 1.	Bonner	.....	.....	43.2	.....	65	9	21	6	36	2.47	.....	0.56	1.0	13	0	24	6	sw.	D. R. Brewster.
Priest River Experiment Station No. 2.	.....do	.....	.....	45.4	.....	73	9	23	6	43	2.41	.....	0.55	1.0	13	0	24	6	sw.	Do.
Priest River Experiment Station No. 3.	.....do	.....	.....	43.4	.....	72	9	18	6	48	2.46	.....	0.57	1.0	13	0	24	6	se.	Do.
Pyle Creek	Boise	3,100	3	.....	.....	.....	.....	.....	.....	.....	2.93	.....	0.57	0	13	10	8	12	w.	P. V. Smith.
Rattlesnake Creek	Elmore	4,000	3	.....	.....	.....	.....	.....	.....	.....	3.59	.....	0.85	0	19	10	6	14	.....	R. M. Green.
Richfield	Lincoln	4,306	3	43.6	.....	74	8	21	16	42	0.95	.....	0.25	4.0	12	11	15	4	sw.	Idaho Irrigation Co.
Roseberry	Boise	4,872	1	34.7	.....	58	8	9	1†	43	1.29	.....	0.25	5.5	13	7	12	11	n.	Dr. Wallace Johnson.
Roseworth	Twin Falls	4,650	.....	.....	.....	.....	.....	.....	.....	.....	0.68	.....	0.25	.....	10	0	22	8	sw.	D. B. Hartwell.
Ruby Creek	Boise	4,400	3	.....	.....	.....	.....	.....	.....	.....	3.49	.....	0.58	10.0	16	7	12	11	w.	O. A. Hatter.
Rupert	Lincoln	4,204	6	44.4	.....	73	8†	19	20	43	1.22	.....	0.32	2.5	12	12	7	11	sw.	Will Parry.
St. Anthony	Fremont	4,966	.....	38.3	.....	66	9	5	20	37	1.12	.....	0.40	.....	6	20	0	10	ne.	Chas. F. Ludlow.
St. Maries	Kootenai	2,263	15	46.2	− 0.9	73	9	26	6	40	2.04	+ 0.26	0.41	T.	14	6	7	17	nw.	J. S. Turnbull.
Salmon	Lemhi	4,040	7	44.0	.....	71	9	23	6	43	1.40	.....	0.71	3.5	5	5	25	0	nw.	B. C. d'Easum.
Sandpoint	Bonner	2,086	2	46.0	.....	73	9	20	18	46	1.94	.....	0.46	0	11	11	4	15	s.	J. H. Edgerton.
Sheep Hill	Boise	5,000	3	.....	.....	.....	.....	.....	.....	.....	1.92	.....	0.37	T.	12	.....	.....	.....	.....	C. M. Gardner.
Shoshone	Lincoln	3,958	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Zell Truman.
Silver City	Owyhee	6,280	5	.....	.....	.....	.....	.....	.....	.....	2.56	.....	0.60	23.0	18	5	14	11	sw.	A. D. Bradfield.
Smith Prairie	Elmore	5,200	3	.....	.....	.....	.....	.....	.....	.....	3.74	.....	1.19	11.0	11	.....	.....	.....	.....	Wm. W. Newell.
Soldier Creek	Blaine	5,755	2	37.6	.....	62	7	11	20	35	3.63	.....	0.72	13.9	14	11	6	13	nw.	J. E. Minear.
Spirit Lake	Kootenai	2,560	2	44.2	.....	73	8†	20	6	47	2.19	.....	0.48	0.7	13	13	7	10	w.	M. C. Krause.
Springfield	Bingham	4,420	4	42.4	.....	72	8	20	20	42	1.23	.....	0.62	2.7	5	8	11	11	sw.	Mrs. W. A. Edwards.
Sugar	Fremont	.....	5	38.0	.....	67	9	7	20	38	1.01	.....	0.24	4.0	8	9	6	15	sw.	Utah-Idaho Sugar Co.
Sunnyside	Elmore	3,500	3	49.8	.....	80	9	28	6	42	1.95	.....	0.75	0	6	.....	.....	.....	nw.	Col. M. W. Wood.
Tripod Mountain	Boise	4,300	3	.....	.....	.....	.....	.....	.....	.....	3.92	.....	0.94	5.7	13	10	4	16	.....	Mrs. Verna Paddock.
Twin Falls	Twin Falls	3,825	7	46.2	.....	76	8	25	20	43	1.68	.....	0.62	4.0	10	6	18	6	sw.	J. A. Waters.
Vernon	Fremont	.....	14	36.2	− 4.9	54	27	3	20	31	1.65	+ 0.54	0.32	8.0	10	6	14	10	sw.	A. M. Slatery.
Wallace	Shoshone	2,728	5	44.7	.....	74	9	24	6	41	3.48	.....	0.75	.....	12	.....	.....	.....	w.	U. S. Weather Bureau.
Weiser	Washington	2,114	.....	50.9	.....	82	9	28	5	44	1.85	.....	0.43	0	14	7	5	18	w.	J. W. Lapish.
Wendell	Lincoln	3,400	4	46.6	.....	77	8†	20	1	48	1.38	.....	0.37	0.4	7	12	13	5	w.	C. L. Dingler.
Washington.																				
Aberdeen	Chehalis	162	21	45.4	− 3.0	66	7	28	5†	35	2.60	− 4.09	0.66	0	14	1	28	1	w.	C. S. Weatherwax.
Anacortes	Skagit	60	18	48.0	.....	68	8	28	5	33	2.06	− 0.12	0.51	0	12	4	22	4	.....	Douglass Allmond.
Baker	....do	200	6	48.0	.....	66	1	33	5†	32	1.84	.....	0.58	0	7	3	11	16	.....	R. M. White.
Bellingham	Whatcom	60	17	49.3	+ 0.3	64	17	33	15†	30	2.04	− 0.09	0.49	0	12	12	9	9	.....	S. B. Mayhew.
Bellingham, near	.....do	107	.....	47.8	.....	60	1†	32	8†	27	2.19	.....	0.47	0	12	7	12	11	.....	U. S. Bureau of Plant Industry.
Blaine	.....do	57	15	46.8	+ 0.6	62	1	27	5	29	2.69	+ 0.04	0.54	0	14	1	17	12	sw.	J. W. Sheets.
Blewett	Chelan	2,200	2	.....	.....	.....	.....	.....	.....	.....	0.91	.....	0.60	2.0	9	18	0	12	.....	John Burmeister.
Bremerton	Kitsap	30	.....	.....	.....	.....	.....	.....	.....	.....	1.84	.....	0.47	0	12	.....	.....	.....	.....	U. S. Navy Yard.
Brewster	Okanogan	1,020	2	49.5	.....	70	8†	33	6	33	2.00	.....	0.63	0	8	6	17	7	sw.	Mrs. H. F. Bertram.
Bumping Lake	Yakima	3,400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cedar River	King	535	5	.....	.....	.....	.....	.....	.....	.....	5.42	.....	0.53	0	20	7	2	21	.....	Geo. Landsburg.
Centralia	Lewis	212	19	48.2	− 1.2	73	1	24	27	41	2.57	− 0.97	0.70	0	14	7	8	15	s.	I. S. Turner.
Cheney	Spokane	2,351	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cle Elum	Kittitas	1,930	13	44.0	− 0.3	74	2	25	3	44	1.54	+ 0.14	0.75	0	8	14	10	6	sw.	J. A. Balmer.
Clearbrook	Whatcom	140	9	46.4	.....	66	15	28	4†	38	3.03	.....	0.46	0	17	1	13	16	sw.	George Gibbs.
Colfax	Whitman	2,300	23	49.0	+ 1.4	82	10	23	14	50	1.40	− 0.26	0.46	T.	10	15[c]	4[c]	8[c]	w.	J. B. Doolittle.
Colville	Stevens	1,635	12	48.6	+ 1.7	76	9	21	21	46	1.47	+ 0.51	0.67	0	10	5	9	16	sw.	W. L. Sax.
Conconully	Okanogan	2,300	12	47.0	+ 0.8	70	8†	26	5	38	3.61	+ 2.79	1.03	T.	12	4	8	18	s.	Wm. Baines.
Cowiche	Yakima	1,874	12	49.0	.....	73	1	31	5†	33	0.94	.....	0.52	0	6	11	16	3	nw.	U. S. Reclamation Service.
Crescent	Lincoln	2,250	12	47.8	+ 1.7	74	9	25	6†	45	1.11	+ 0.15	0.60	0	6	17	8	5	.....	Otto Wollweber.
Darrington	Snohomish	.....	.....	46.8	.....	69	1†	29	16	38	2.70	.....	0.73	0	17	9	13	8	.....	N. C. Rhoads.
Davenport	Lincoln	2,450	3	45.8[b]	.....	72[c]	9†	25[b]	25	38[b]	0.74	.....	0.60	0	3	16	4	10	sw.	J. L. Thayer.
Dayton	Columbia	1,700	26	49.0	− 0.3	78	9	30	18	36	2.24	+ 0.38	0.43	0	12	3	21	6	sw.	W. W. Hendron.
Deer Park	Spokane	2,050	3	45.8	.....	73	9	24	6	43	1.89	.....	0.87	T.	8	5	10	15	sw.	James Mills.
Detroit	Mason	30	4	48.4	.....	68	8	30	5	36	2.87	.....	0.78	0	10	7	9	14	sw.	Walter O. Eckert.
Dixie	Walla Walla	5,000	3	.....	.....	.....	.....	.....	.....	.....	6.26	.....	1.31	21.0	15	1	11	18	sw.	T. Z. Andrews.
Douglass Lake	Skagit	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.09	.....	0.52	0	14	.....	.....	.....	.....	Douglass Allmond.
Dryden	Chelan	960	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Duckabush	Jefferson	380	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ellensburg	Kittitas	1,571	24	48.2	+ 0.4	79	1	25	1†	54	0.65	+ 0.07	0.40	0	4	14	9	7	nw.	R. L. Barnes.
Ephrata	Grant	1,265	9	51.6	.....	78	20	32	12	44	.....	.....	0.55	0	.....	19	8	3	.....	T. J. Cook.
Forks	Clallan	480	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Simcoe	Yakima	1,427	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gerome	Stevens	2,900	3	49.0	.....	71	9	27	6	38	2.98	.....	0.87	0	10	6	18	6	.....	J. H. C. Scurlock.
Goat Lake	Snohomish	2,900	3	.....	.....	.....	.....	.....	.....	.....	4.55	.....	0.82	7.0	17	.....	.....	.....	.....	C. M. Mackintosh.
Gold Basin	.....do	1,360	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gold Creek	Yakima	2,600	3	.....	.....	.....	.....	.....	.....	.....	1.60	.....	0.65	0	5	7	13	10	w.	J. W. Anderson.
Goldendale	Klickitat	1,600	6	48.0	.....	73	9	25	14	38	1.06	+ 0.31	0.38	0	5	6	23	1	w.	Klickitat County Abstract Co.
Granite Falls	Snohomish	397	9	.....	.....	.....	.....	.....	.....	.....	4.68	.....	0.92	0	16	3	12	15	nw.	C. H. Cleaver.
Grays River	Wahkiakuk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guler	Klickitat	2,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hanford	Benton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hatton	Adams	1,100	7	49.5	.....	79	9	27	25†	43	0.75	.....	0.36	0	8	8	4	18	sw.	Dr. A. V. Marion.

TABLE 1.—*Climatological data for April, 1912. District No. 12*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Washington—Contd.																			
Huntsville	Columbia	1,400	4	.....	.....	.....	.....	.....	.....	.....	2.63	.....	0.75	0	6	.....	.....	.....	.....	Mrs. S. J. Hill.
Irene Mountain	Okanogan	3,015	3	.....	.....	.....	.....	.....	.....	.....	2.15	.....	0.49	0.7	11	5	10	15	sw.	Mrs. Manda S. Shain.
Kennewick	Benton	368	17	54.8	+ 0.1	80	9	30	14	45	0.73	+ 0.47	0.24	0	6	4[j]	4[j]	12[j]	.....	R. E. Reed.
Kent	King	.....	.....	48.6	.....	69	9	30	5	38	3.00	.....	0.44	0	17	5	6	19	s.	A. O. Jeffries.
Kettle Falls	Stevens	1,265	3	49.7	.....	77	9	28	5†	45	1.04	.....	0.38	0	7	7	18	5	.....	Harry H. Cole.
Kiona	Benton	430	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kosmos	Lewis	775	6	47.0	.....	72	1†	29	14†	41	2.33	.....	0.62	0	19	4	21	5	ne.	J. A. Ulsh.
La Center	Clarke	250	15	45.3	− 4.4	70	24	25	14	38	2.70	− 0.64	0.52	0	14	7	14	9	sw.	Joseph Brothers.
La Crosse	Whitman	1,400	3	48.8	.....	80	9	24	15	49	0.95	.....	0.30	T.	8	11	8	11	w.	M. E. Schreck.
Lake Cle Elum	Kittitas	2,171	3	.....	.....	.....	.....	.....	.....	.....	0.60	.....	0.22	0	7	8	7	15	nw.	U. S. Reclamation Service.
Lake Kachess	....do	2,335	4	41.6	.....	62	1	27	2†	34	1.62	.....	0.49	2.0	12	11	5	14	nw.	Do.
Lake Keechelus	....do	2,479	4	.....	.....	.....	.....	.....	.....	.....	2.36	.....	0.62	4.0	13	4	11	15	w.	Do.
Lakeside	Chelan	1,116	21	51.2	+ 0.7	69	8	35	6†	32	0.87	+ 0.15	0.32	0	10	3	24	3	w.	W. H. Van Meter.
Laurel	Klickitat	1,900	3	.....	.....	.....	.....	.....	.....	.....	1.69	.....	0.78	0	5	4	25	1	w.	Mrs. Minnie E. Strout.
Laurier	Ferry	1,644	2	47.1	.....	73	10	26	6	39	1.61	.....	0.37	0	12	4	9	17	e.	Mrs. J. S. Myers.
Lester	King	1,614	8	45.4	.....	69	1	28	15†	36	3.95	.....	0.90	0	14	4	13	13	w.	Augustine Smith.
Lone Tree	Chehalis	14	3	47.5	.....	56	8†	37	5	17	5.05	.....	1.15	0	17	2	19	9	nw.	U. S. Engineer Corps.
Longmires Springs	Pierce	2,800	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lost Creek	Okanogan	3,125	3	.....	.....	.....	.....	.....	.....	.....	0.10	.....	0.04	0	6	4	16	10	s.	P. H. Leese.
McConihe	Grant	1,072	....	50.6	.....	74	9	29	15	40	0.31	.....	0.16	0	6	13	4	13	s.	Paul M. McConihe.
McCumbers Ranch	Yakima	2,182	3	.....	.....	.....	.....	.....	.....	.....	1.00	.....	0.35	0	5	4	26	0	sw.	Mrs. Mary McCumber.
Moses Lake	Grant	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.35	.....	0.17	0	4	24	2	6	sw.	C. C. Ward.
Mottinger	Benton	307	12	55.2	− 0.8	81	1	35	13	40	1.19	+ 0.61	0.40	0	6	23	3	4	w.	G. H. Mottinger.
Mount Pleasant	Clallam	500	....	43.8	.....	58	1†	28	5	23	1.31	.....	0.63	0	10	3	11	16	.....	Wm. M. Dorr.
Moxee	Yakima	1,000	20	51.0	+ 0.7	78	1†	25	14	50	0.74	+ 0.28	0.35	0	6	6	19	5	w.	H. B. Scudder.
Newport	Stevens	2,400	2	45.1	.....	71	9	22	6	43	1.75	.....	0.63	0	9	6	17	7	sw.	Chas. M. Talmadge.
North Head	Pacific	211	10	46.6	− 0.9	54	1	41	13	11	3.19	− 0.03	0.75	0	17	7	10	13	nw.	U. S. Weather Bureau.
Northport	Stevens	1,350	13	49.8	.....	75	9	28	5	42	1.73	+ 0.70	0.50	0	12	10	15	5	.....	W. F. Case.
North Yakima	Yakima	1,070	3	52.5	.....	76	1†	30	14	40	0.63	.....	0.32	0	5	8	11	11	nw.	Albert Bender.
Nutland	Klickitat	.....	3	51.7[a]	.....	73	1†	32[a]	11†	32[a]	1.26	.....	0.69	0	6	.....	.....	.....	.....	Ruth J. Shepard.
Odessa	Lincoln	1,540	9	48.6	.....	75	9	30	5†	40	0.74	.....	0.49	0	7	2	24	4	sw.	H. W. Rieke.
Olga	San Juan	50	22	48.0	0	59	15	32	5	20	2.09	+ 0.05	0.65	0	8	5	18	7	sw.	Cecil S. Willis.
Olympia	Thurston	200	34	47.8	− 1.1	69	15	28	5	40	2.68	− 1.11	0.58	0	12	10	5	15	nw.	M. O'Connor.
Omak	Okanogan	850	3	51.6	.....	77	9	28	2	46	1.24	.....	0.41	0	6	10	9	11	s.	Saint John Umbrite.
Oroville	....do	922	3	52.8	.....	74	8†	30	2	40	2.10	.....	0.80	0	8	6	17	7	s.	M. C. Jackman.
Peola	Garfield	5,000	3	.....	.....	.....	.....	.....	.....	.....	2.25	.....	0.61	5.1	15	13	5	12	nw.	Samuel Gruell, sr.
Pomeroy	....do	1,500	20	47.8[c]	− 2.6	74[c]	2	28[c]	14	36[c]	1.65	+ 0.42	0.41	0	9	3[c]	6[c]	18[c]	w.	Peter McClung.
Port Crescent	Clallam	259	17	43.6	− 1.1	58	29	29	14	23	1.10	− 1.42	0.32	T.	15	1	15	14	nw.	U. S. Weather Bureau.
Port Townsend	Jefferson	80	22	49.2	+ 0.7	62	6	33	5	23	1.34	− 0.33	0.50	0	10	14	6	10	w.	F. Plummer.
Prosser	Benton	650	....	52.8[a]	.....	70[a]	16	31[a]	26	38[a]	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. L. Capps.
Pullman	Whitman	2,550	20	44.8	− 2.5	74	9	30	6	35	1.80	+ 0.41	0.53	0	9	7	11	12	sw.	Henry Holtz.
Queets River	Chehalis	16	....	46.2	.....	63	1	30	14†	28	7.59	.....	2.70	0	18	7	5	18	s.	C. A. Bullard.
Quinaiault	....do	300	5	46.0	.....	65	8†	29	4†	33	7.86	.....	1.90	0	18	3	16	11	w.	A. V. Higley.
Republic	Ferry	2,628	12	44.6	− 0.7	71	9	24	6	44	2.16	.....	0.52	0.5	14	7[a]	5[a]	17[a]	nw.	Geo. B. Stocking.
Rex Creek	Chelan	1,135	4	48.0	.....	67	7	33	4	29	1.31	.....	0.65	0	5	1	15	14	nw.	Jas. W. Nicol.
Ritzville	Adams	1,825	13	.....	.....	.....	.....	.....	.....	.....	0.84	+ 0.42	0.43	0	8	.....	.....	.....	.....	Agent N. P. R. R.
Robertsville	Klickitat	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rock Lake	Whitman	1,910	6	48.1	.....	71	2†	25	6	39	0.84	.....	0.56	0	4	12	6	12	sw.	P. M. Ramsey.
Rosalia	....do	2,425	20	46.2	0	74	9	28	15	35	0.77	− 0.64	0.26	0	9	4	17	9	sw.	Hans Mumm.
Russells Ranch	Yakima	2,870	3	.....	.....	.....	.....	.....	.....	.....	0.95	.....	0.45	T.	6	12	12	6	w.	Mrs. Adella Russell.
Seattle	King	123	20	48.0	− 1.4	64	1	35	5	21	1.73	− 0.95	0.38	0	16	1	10	19	s.	U. S. Weather Bureau.
Sedro Woolley	Skagit	38	15	49.6	− 0.8	70	8†	30	5	38	2.92	− 0.27	0.75	0	11	9	7	14	.....	Mrs. H. L. Devin.
Sixprong	Klickitat	1,240	5	51.6	.....	75	1†	33	11†	38	0.88	.....	0.28	0	7	15	4	11	sw.	C. E. Comstock.
Skagit Power Dam	Whatcom	510	2	48.0	.....	69	1	32	2†	34	2.75	.....	0.97	0	13	9	8	13	.....	C. B. Emery.
Snohomish	Snohomish	100	18	49.6	+ 0.1	74	22	32	12	33	2.90	− 0.54	0.60	0	8	18	0	12	nw.	James Bylling.
Snoqualmie Falls	King	667	12	48.2	.....	69	1	32	5	35	4.50	+ 0.30	0.83	1.0	20	10	5	15	.....	O. N. Wiswell.
Snoqualmie Pass	....do	3,000	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21.0	7	.....	.....	.....	.....	C. E. Ingraham.
Snyders Ranch	Okanogan	2,200	3	43.4	.....	69	9	24	2†	45	2.16	.....	0.81	0	5	7	21	2	e.	Geo. M. Snyder.
South Bend	Pacific	.....	17	46.5	− 2.7	66	9	29	15	31	3.20	− 4.59	0.76	0	13	5	15	10	w.	Mrs. W. E. Buckingham.
Spokane	Spokane	1,943	31	48.2	+ 0.5	74	9	30	6	36	0.94	− 0.35	0.48	T.	8	3	10	17	sw.	U. S. Weather Bureau.
State University	King	170	3	48.8	.....	63	1	37	5	21	2.44	.....	0.54	0	16	6	9	15	s.	State University.
Stokes Ranch	Okanogan	2,670	3	.....	.....	.....	.....	.....	.....	.....	2.05	.....	0.89	0	9	6	20	4	w.	Chas. W. Gunn.
Sumner	Pierce	77	4	48.6	.....	69	1	27	9	37	3.18	.....	0.48	0	18	6	6	18	sw.	H. E. Thompson.
Sunnyside	Yakima	740	17	51.6	+ 0.1	77	1	28	14	46	0.61	+ 0.26	0.19	0	7	6	19	5	nw.	U. S. Reclamation Service.
Tacoma	Pierce	213	26	47.9	− 1.0	64	1	33	5	25	2.51	− 0.25	0.51	0	15	2	8	20	sw.	U. S. Weather Bureau.
Tatoosh Island	Clallam	85	27	46.8	+ 0.7	56	22	37	4	14	4.24	− 2.07	1.71	0	15	1	20	9	w.	Do.
Tieton	Yakima	2,000	3	44.4	.....	69	9	25	14	39	1.18	.....	0.52	0	8	9	7	14	w.	U. S. Reclamation Service.
Tonasket	Okanogan	945	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Touchet	Walla Walla	556	5	52.3	.....	78	9	28	6	44	1.27	.....	0.72	0	7	12	14	4	sw.	D. W. Dorrance.
Touchet Ridge	Columbia	2,500	3	.....	.....	.....	.....	.....	.....	.....	6.91	.....	1.30	34.0	14	2	15	13	n.	R. H. King.
Trinidad	Douglas	900	8	53.4	.....	77	9	34	5	33	0.82	.....	0.24	0	5	18	6	6	nw.	J. C. Wheeler.
Vancouver	Clarke	100	37	49.9	− 1.8	74	1	30	14	38	1.85	− 0.71	0.52	0	13	6	11	13	nw.	A. A. Quarnberg.
Vashon Island	King	40	23	47.0	− 1.8	62	1	35	6†	24	2.82	− 0.20	0.38	0	21	6	3	21	s.	Gertrude McClintock.
Wahluke	Grant	410	8	53.8	.....	76	1†	34	6†	40	0.57	.....	0.39	0	4	9	10	11	.....	F. C. Koppen.
Wallace	Okanogan	4,000	3	.....	.....	.....	.....	.....	.....	.....	5.02	.....	0.94	10.0	15	3	17	10	s.	G. A. Wallace.
Walla Walla	Walla Walla	1,000	28	52.2	− 0.6	75	9	37	14	34	2.07	+ 0.37	0.82	0	13	9	7	14	sw.	U. S. Weather Bureau.
Washougal	Skamania	650	12	48.2	− 2.8	67	1†	29	14	32	3.68	− 0.12	0.58	0	12	9	9	12	w.	F. M. Grout.
Waterville	Douglas	2,624	22	45.0	− 0.5	69	9	26	6	34	1.67	+ 0.81	0.95	0	8	13	11	6	nw.	O. R. Hopewell.
Wenatchee (near)	Chelan	1,160	13	47.1	− 0.9	66	1†	29	5	25	1.20	+ 0.46	0.35	T.	6	4	17	9	w.	Geo. A. Pitcher.
White Salmon	Klickitat	325	....	51.4	.....	78	2	31	14	42	0.75	.....	0.35	0	7	16	9	5	w.	C. W. J. Reckers.
Wilbur	Lincoln	2,203	13	47.6	+ 2.0	78	8	24	5†	46	0.16	− 0.70	0.12	0	2	5	12	13	sw.	Rollin J. Reeves.
Wind River	Skamania	1,300	....	45.2	.....	72	8	25	14	43	3.48	.....	1.25	0	13	8	8	14	w.	U. S. Forest Service.
Winthrop	Okanogan	1,765	....	47.8	.....	71	8	27	2	43	1.61	.....	0.80	0	9	11[b]	13[b]	4[b]	.....	Methow Trading Co.
Yacolt	Clarke	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.22	.....	1.10	0	14	5	4	21	w.	C. R. Miller.
Yale	Cowlitz	375	5	47.3	.....	72	8	31	14	34	4.03	.....	0.92	0	16	11	1	18	sw.	J. A. Williams.
Zillah	Yakima	800	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oregon.																			
Albany	Linn	212	30	48.4	− 3.4	71	1	28	13	38	2.29	− 0.78	0.36	0	14	5	11	14	.....	F. M. French.
Ashland	Jackson	1,963	28	46.1[a]	− 3.7	74[a]	6	31[a]	22	33[a]	4.81	+ 2.99	0.89	3.5	17	2	11	17	nw.	G. G. Eubanks.
Astoria	Clatsop	16	51	48.0	− 1.7	61	8†	35	5†	24	3.53	− 2.73	0.73	0	15	11	5	14	nw.	Irving Club.
Austin	Grant	4,250	1	44.4	.....	66	2†	28	17	28	2.19	.....	0.67	0	14	3	5	18	w.	U. S. Forest Service.
Baker	Baker	3,466	22	43.4	− 0.1	71	9	25	6	36	1.05	+ 0.11	0.25	1.2	13	3	12	15	se.	U. S. Weather Bureau.
Bay City	Tillamook	14	18	48.2[d]	− 0.7	62[d]	9	29[a]	15	30[a]	4.74	− 2.03	1.54	0	19	8	9	13	nw.	John O. Bozorth.
Bend	Crook	3,629	30	41.9	.....	72	1	18	19	46	1.74	.....	0.66	4.0	6	10	18	2	sw.	Bend Bulletin.
Black Butte	Lane	1,200	11	42.8	.....	63	8	26	14	32	6.05	.....	1.00	0	12	11	5	14	nw.	Wm. Harris.
Blalock	Gilliam	237	14	53.2	− 2.2	77	1	30	5	39	0.58	+ 0.04	0.49	0	3	8	10	11	w.	Geo. W. Long.
Brogan	Malheur	2,600	2	51.6	.....	79	19	31	6	43	1.16	.....	0.50	0	5	13	7	10	nw.	A. B. Cox.

TABLE 1.—*Climatological data for April, 1912. District No. 12*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Oregon—Continued.																				
Buell	Polk		1																	E. V. D. Paul.
Burns	Harney	4,157	21	42.8	− 0.6	72	8	22	17†	38	1.97	+ 1.42	0.61	13.0	13	6	9	15	sw.	J. C. Welcome, jr.
Cascade Locks	Hood River	100	22	49.4	− 2.4	70	1	30	15	36	3.02	− 2.73	0.70	0	15	8	6	16	w.	Val. W. Tomkins.
Cazadero	Clackamas	503	3	49.4		72	1	32	14	35	4.18		1.10	0	14	4	4	22	nw.	Alf. Drill.
Cliff	Lake	4,300	5	38.5		71	9	11	5†	54	1.39		0.31	4.0	11	3	9	18	sw.	John C. Green.
Condon	Gilliam	2,884	5																	C. H. Williams.
Corvallis	Benton	266	24	48.3a	− 1.8	67	8	33	22	32	2.26	− 0.59	0.35	0	12a	7a	9a	10a	sw.	Oregon Agricultural College.
Crescent	Klamath	4,400	...	37.4		67	8	13	22	46	2.32		1.00	12.5	14	5	21	4	sw.	A. M. Caisse.
Dayville	Grant	2,200	18	46.8	− 3.2	75	2†	22	1	51	3.22	+ 2.24	0.68	1.0	12	3	15	12	nw.	Dr. J. Campbell-Martin.
Deadwood	Lane	350	2	47.9		72	8	30	14	38	4.86		1.32	0	12	5	11	14	nw.	Jos. Slemmons.
Doraville	Columbia	600	10	45.6	− 2.4	65	8	30	5†	31	2.39	− 0.93	0.82	0	20	3	7	20	nw.	Jos. Hackenberg.
Drain	Douglas	300	10	49.0		72	6	29	14	40	4.60		1.27	0	16	3	14	13	sw.	Ira Wimberly.
Echo	Umatilla	625	8	52.3		77	1	30	6	45	1.04		0.42	0	8	9	4	17	w.	R. B. Stanfield.
Ella	Morrow	830	8			74	9				1.86	+ 1.37	0.40	0	7	15	7	8	sw.	Carl F. Troedson.
Eugene	Lane	449	22	49.0	− 1.2	86	1	32	13†	42	3.32	+ 0.64	0.58	0	19	6	8	16	s.	University of Oregon.
Fairview	Coos	142	16																	Wm. Bettys.
Forest Grove	Washington	220	23	48.8	− 0.6	76	7	32	12	40	3.24	+ 0.36	0.66	0	11	4	13	13	w.	Pacific University.
Gardiner	Douglas	72	23																	Hon. J. S. Gray.
Glendale	do	1,441	8	48.7		73	8	30	21	40	6.74		2.00	4.5	14	9	13	8		B. J. Simpson.
Glenora	Tillamook	575	21	46.0	− 1.7	74	1	27	15	44	5.53	− 4.63	1.01	T.	18	5	4	21	n.	Mrs. Jennie A. Reeher.
Gold Beach	Curry	40	11	47.5		59	3†	32	14	21	9.14	+ 5.17	2.60	0	15	11	16	3	s.	John W. Riley.
Grants Pass	Josephine	956	24	48.6	− 2.5	78	1	26	5	48	4.14	+ 2.47	1.73	0	14	6	4	20	sw.	John B. Paddock.
Grass Valley	Sherman	2,381	11	45.7		70	3†	22	14	42	1.26		0.37	0	5	5	15	10	nw.	Agent O. W. R. & N. Co.
Gurdane	Umatilla	3,500	3	48.8		79	23	27	19†	46	0.18		0.05	0	6	5	15	10	w.	Miss Belle Ely.
Headworks	Clackamas	719	10	43.6		69	1	28	14	35	4.88		0.86	0	18	4	13	13	sw.	Portland Water Works.
Heppner	Morrow	1,950	22	47.4	− 1.0	72	1	31	6	38	2.55	+ 1.45	0.73	0	12	4	20	6	w.	Frank Gilliam.
Hermiston	Umatilla	451	5	52.6		78	1	28	1†	50	0.67		0.21	0	10	14	12	4		C. W. Kellogg.
Hermoso Rio	Crook	2,300	2	46.2f		75f	1	25f	22	46	1.37		0.54	0	6	16	4	10	e.	Carl T. Hubbard.
Hood River	Hood River	300	22	49.8	+ 0.3	75	8	27	13	41	0.75	− 1.29	0.20	0	4	6	7	17	w.	H. L. Hasbrouck.
Hood River No. 2	do	485	1	50.5		75	8†	26	8	49	0.67		0.15	0	4	12	4	14	nw.	W. H. Lawrence.
Hood River No. 3	do	620	1	49.6		78	9	26	14	45	0.64		0.29	0	5	11	17	2	nw.	U. A. Newman.
Hood River No. 4	do	850	1	49.5		75	7	27	14	44	0.69		0.35	0	4	13	6	11	w.	Fordham B. Kimball.
Huntington	Baker	2,165	11	57.1		90	9	40	16†	35	1.20		0.75	3.0	9	9	8	13	w.	Agent O. W. R. & N. Co.
Jacksonville	Jackson	1,640	24	47.9	− 3.1	73	6†	31	14†	40	4.50	+ 3.21	0.95	0	14	7	9	14		E. Britt.
Joseph	Wallowa	4,400	23	41.7	− 0.1	71	8	23	14	38	2.85	+ 1.46	0.60	0	13	6	5	19	s.	F. F. McCully.
Klamath Agency	Klamath	4,169	4	45.6		76	8	24	13	41	0.71		0.40	7.0	3	17	5	8	w.	Edson C. Watson.
Klamath Falls	do	4,100	23	42.3	− 5.1	73	10	21	5	41	1.49	+ 0.58	0.43	4.0	8	8	2	20	se.	Augusta J. Hayden.
La Grande	Union	2,784	24	45.6	− 2.1	71	9	25	6	41	3.03	+ 1.49	0.59	0	18	10	10	10	w.	W. A. Worstell.
Lakeview	Lake	4,825	29																	Ralph C. Koozer.
McKenzie Bridge	Lane	1,400	11	45.4	− 3.6	76	6	20	22	52	5.35	+ 1.20	1.19	0	19	4	6	24	sw.	Geo. Frissell.
McMinnville	Yamhill	182	25	48.0	− 2.3	68	1	30	11†	34	3.04	− 0.04	0.62	0	15	11	5	14	sw.	M. E. Pettit.
Marshfield	Coos	34	11	46.4	− 4.0	62	14	28	13†	34	6.38		1.34	0	16	5	8	17	nw.	U. S. Weather Bureau.
Meadow Brook Ranch	Hood River	850	1	48.6		72	8	28	14	37	0.92		0.33	0	7	17	13	0	nw.	John W. Palmer.
Medford	Jackson	1,425	2	49.3		76	6	29	5	44	4.40		1.47	2.0	14	7	10	13	nw.	U. S. Weather Bureau.
Merrill	Klamath	4,079	7																	Mrs. Agnes Ritchson.
Metolius	Crook	2,525	2	46.0		75	8	24	14†	46	0.80		0.35	0	7	6	5	19	sw.	W. E. Lottman.
Mikkalo	Gilliam	1,400	6	48.2		70	1†	28	6	37	1.11		0.47	0	6	12	6	12	w.	Frank Little.
Miramonte Farm	Clackamas	195	24	48.8		70	1	28	13	36	2.51		0.48	0	14	8	5	17	sw.	G. Muecke.
Monroe	Benton	350	15	48.2	− 2.3	70	6	28	13	32	2.71	+ 0.23	0.82	0	9	6	7	17	nw.	L. A. Peek.
Mount Angel	Marion	485	26	49.6	− 1.5	68	8	33	14	29	2.93	− 0.60	0.50	0	11	7	9	14	s.	Dr. Urban Fischer.
Mount Hood	Hood River	1,650	2	45.8		71	1	26	14	40	0.41		0.18	0	3	12	6	12	nw.	S. G. Babson.
Musick	Douglas	5,000	3	37.0		61	6	21	22	29	10.11		2.70	59.0	16	8	4	18	sw.	Alex. Lundberg.
Newport	Lincoln	69	25	49.1	+ 0.1	62	26	34	15	26	3.86	− 1.50	0.61	0	13	7	10	17	nw.	Wm. Mathews.
Odell	Hood River	1,000	1	48.6		72	1	31	14	38	0.80		0.35	0	3	3	20	7		T. A. Decker.
Ortley	Wasco	1,600	1	46.0		68	1	29	14	32	1.30		0.60	0	3	17	10	3	w.	L. D. Firebaugh.
Paisley	Lake	4,500	9																	E. C. Woodward.
Parkdale	Hood River	1,450	1	45.8a		72a	1	23a	14	42a	1.17		0.51	0	8	6	16	8	nw.	Isaac Beal.
Pendleton	Umatilla	1,070	23	49.4	− 2.2	76	6	28	14	47	2.00	+ 1.03	0.61	T.	9	7	15	8	w.	E. F. Overill.
Pilot Rock	do	1,817	4	49.4		77	23	29	11†	43	2.91		0.88	0	12	12	5	13	sw.	John P. McManus.
Pompeii	Clackamas	3,879	17	35.2	− 3.6	62	8	20	4†	32	4.47	− 1.41	1.05	17.2	13	5	6	19	sw.	E. Coalman.
Portland	Multnomah	57	42	49.8	− 1.4	72	1	34	14	30	2.04	− 1.01	0.48	T.	16	4	2	24	sw.	U. S. Weather Bureau.
Port Orford	Curry	80	7																	J. D. Loucks.
Prairie City	Grant	3,425	1	44.0		78	9	25	5	48	3.63		0.81	0	18	6	8	16	sw.	A. M. F. Kirchheimer.
Prineville	Crook	2,864	16	44.0	− 2.5	73	12	20	2†	50	1.63	+ 0.83	0.53	0	7	13	11	6	w.	Geo. Summers.
Prospect	Jackson	2,800	6																	H. C. Stoddard.
Ramsey	Wasco	1,350	11	45.8b	....	67b	†1	25b	14	34b	0.78		0.33	0	4	16	4	10	w.	Mrs. Iva B. Collins.
Range	Grant	3,500	4	42.2		74	9	24	13	43	3.50		0.70	0	14	10	10	10		Mrs. Emma Arbuckle.
Redmond	Crook		1	43.1a		75	7	22	13	50						12	7	10	nw.	E. E. Foote.
Richland	Baker	2,350	11	47.9		77	9	23	6†	46	0.45		0.25	0	2	7	9	14	sw.	L. G. Morgan.
Riverside	Malheur	3,000	13	45.7	− 2.7	85	2	20	5	54	2.87	+ 2.25	0.75	10.0	12	8	19	3	w.	Mrs. Leah Fairman.
Roseburg	Douglas	510	34	49.0	− 1.9	76	6	31	14	41	3.86	+ 1.38	1.06	0	18	7	12	11	nw.	U. S. Weather Bureau.
Salem	Marion	120	22	49.4	− 1.2	66	1	35	13	28	2.03	− 0.91	0.40	0	12	7	0	23	sw.	M. P. Baldwin.
Seneca	Grant	4,800	1	36.5		67	12	15	1†	48	2.17		0.60	10.0	10	2	16	12	nw.	E. J. Southworth.
Silver Lake	Lake	4,700	15	40.4	− 2.4	72	9	15	14	50	1.34	+ 0.56	0.55	3.0	8	9	10	11	sw.	G. W. Marvin.
Siskiyou	Jackson	4,115	4	40.0		66	1	23	19	31	5.03		0.88	24.5	15	1	12	17	s.	U. S. Weather Bureau.
Sparta	Baker	4,150	21	45.1	+ 1.4	72	8	25	5	33	1.59	+ 0.13	0.67	0.7	8	7	16	7	e.	J. A. Wright.
Stafford	Clackamas	400	16	48.4	− 2.0	69	8	28	13	33	2.47	− 1.03	0.52	0	16				sw.	John P. Gage.
The Dalles	Wasco	112	38	53.2	− 0.3	74	1	31	14	35	0.28	− 0.38	0.16	0	3	13	4	13	w.	S. L. Brooks.
Toledo	Lincoln	75	22	45.9	− 3.2	62	15†	24	26	38	5.08	− 0.78	1.10	0	11	15	14	1	sw.	C. B. Crosno.
Umatilla	Umatilla	340	24	55.2	+ 0.6	80	1	32	1	48	1.34	+ 0.78	0.40	0	9	6	3	21	sw.	Mrs. Helen T. Duncan.
Union	Union	2,787	...	45.8		75	9	25	14	45	1.42		0.40	T.	12	11	11	8	s.	Robt. Withycombe.
Vale	Malheur	2,242	20	49.9	+ 1.4	82	9	23	6	47	1.62	+ 0.80	0.50	0	15	15	10	15	ne.	H. P. Osborne.
Van	Harney	3,506	...	38.8a		66	3	21	6†	41	2.39		0.55	14.0	5a	9	5a	11a	nw.	Geo. Howe.
Vida	Lane	980	1	46.5a		71	6	30	14	33	5.86		0.81	T.	18	8	4	18	w.	W. H. Pendell.
Waldo	Josephine		1																	M. M. Lewis.
Wallace Orchard	Polk	170	3	47.8		69	1†	27	13	35	2.80		0.54	0	13	1	15	14		Chas. A. Park.
Wallowa	Wallowa	2,935	9	43.6a		75	9	23	6†	47	2.11		0.51	0.4	14	2	5	23	nw.	L. J. Coverstone.
Wamic	Wasco	1,500	11	41.8b		76	2b	20	14b	49b	0.36		0.20	0	2	8a	4a	17a	w.	A. J. Swift.
Warmspring	Crook	1,500	10	47.9		76	1†	22	22	47	0.66		0.36	0	5	12	12	6	nw.	Claud C. Covey.
Westfall	Malheur	3,000	1																	H. M. Gilliam.
Weston	Umatilla	1,800	20	47.4	− 0.9	71	6	30	1†	40	3.52	+ 1.40	0.92	T.	12	8	8	14	sw.	M. A. Baker.
Williams	Josephine	1,368	20	47.3	− 2.5	77	6	26	22	49	4.19	+ 2.68	1.02	T.	15	6	11	13	s.	Francis J. Le Roy.
Yonna	Klamath	4,146	5	38.7		70	7	12	5	47	1.86		0.55	0	8	3	20	7	s.	Jacob Rueck.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1912. District No. 12, Columbia Valley.*

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Montana.																																
Anaconda	Missoula			T.	T.	.02					T.		*	.54	.03	T.	T.	.03	T.	.10		.03	.01	T.	.20	T.				.12	T.	1.08
Butte	do			T.	T.	T.							.02	.02		T.	T.	T.	T.	T.	T.	T.	.30		.10	T.				.15	.05	0.64
Columbia Falls	Flathead					.50						.50					.20								.05	.13				.30	.01	1.78
Como	Bitter Root													.02	.01	.43		.17	.34					.07	.02				.05	.08		1.19
East Anaconda	Missoula			T.	.02	T.					T.	T.	*	*	.40	T.	*	.23	.09	.01	T.	.02	.01	*	.24	T.	T.		*	.18	T.	1.20
Fortine	Kootenai					.04						.57														T.	T.		T.	.32	.06	0.99
Hamilton	Bitter Root													.21	.02	.50	.72	.04	.35	.36					.08				T.	.10	T.	2.38
Hat Creek	Missoula					.28							.05	.90	T.		.20		T.				T.	.12	.11	.30					.10	2.06
Haugan	do				.22	.02					.10								.12	.60				.03	.18					.30	.10	1.67
Heron	Columbia				.21	.07						.40		.03					.36	.43					.02				.04	.25	.14	1.95
Kalispell	Flathead			T.	.03	.02					.34	.06					T.	.02	.01				T.	.02		T.		.01	T.	.10	T.	0.61
Libby	Kootenai				T.	T.						.23		T.					.21	.18					T.					.13		0.75
Lost Creek	Missoula												.08	.50				.10		.28		T.	T.		.15					T.		1.11
Missoula	do				.01						T.	T.		.02	.10	.01	.26		1.39	.04	T.				.03	.14		T.	T.	.02		2.02
Ophir	do				T.	.06					T.		.10	.30	.11		.13	.25	.30	.05			T.		.28	.09				.21	T.	1.88
Ovando	do	T.			.15	.20				T.	T.	.12	.05	.15	T.	T.	.60	.15	.05	.16	T.			.05	.03	.10	T.	T.	.04	T.	T.	1.85
Philipsburg	do													.10		.10			.50				.15	T.	.20					T.	1.05
Plains	Columbia													T.					T.	T.					T.				T.		T.	
Pleasant Valley	Kootenai					.08					.22					.05	T.	.20	.10	.10					.12	T.			.04	.05		0.96
Polson	Flathead											.15							.08					.12			.14	.04			.51	1.04
Proctor	do											.05											.02	.02						.06	T.	0.15
Saint Ignatius	do				.02	.05						.02			T.				.10	.11			T.			.16	T.	.01	.02	.18	.02	0.69
Saltese	Missoula				.14						.10								.43						.21					.74		1.62
Stevensville	Bitter Root																.23			.32					.06							0.61
Thompson Falls	Columbia														.05		T.	.05	.37	.55					.15	.05			T.	.19	.13	1.54
Trout Creek	do																															
Willow Glen Stock Farm.	Missoula																															
Wyoming.																																
Afton	Snake				.05						.10		.03		.20				.07		.02	.15	.05	.05	.04					.12	.23	0.91
Alta	do					.11					.20				.20					.24	.12	.21	.22			.30				.22		1.82
Bechler River	do	.05	.05	1.00	.05	.07		.08	.06	.06		.04	.30	.50	.03	.08	.04	.04	T.	.75	.10		.04	.04	.01	.85	1.01	.06	.01	.02	T.	5.34
Bedford	do					.25					.12		.03	.03	T.							.15	.07							.04	.12	0.81
Moran	do					.32					.17		.27	.01	.02		.07			.31	.01		.07			.26				.29	.08	1.88
Snake River	do				T.	.20					.20		.30	.20	.10			.20		.50	.35	T.	T.		T.	.80	.20			.50		3.55
Nevada.																																
San Jacinto	Snake												.40	.40						.35												1.15
Utah.																																
Standrod	Raft				.07	.44					.21	.18	.05	.01		.06		.02	T.	.47		T.	.11		.09					T.	1.71
Idaho.																																
Albion	Snake																															
Almo	do					.33					.37	.13	.04	T.			T.	.14		.43	.03			.10	.43							2.00
Alpha	Payette																															
American Falls	Snake											.30	.38	.34					.36	.37					.18					.16		2.09
Arrow Rock	Boise					.03					.02	.18	.25	.15	.15	.10			.03	.04	.15	.20			.45				.09	.30	.26	2.40
Blackfoot ‖	Blackfoot				.11							T.	.42	.03		T.		.05	.15	T.	.22	T.	T.		T.	.08		T.	.07	.04	T.	1.17
Blackfoot Dam	do					.60							.12	.10					.16	.10		.17			.05	.10				.15	.07	1.62
Bock's ranch	Boise			T.	T.						.12	.12	.31	.18		.18		.16		.07	.05	.10			.42	.03			.06	.39	.34	2.53
Bogus Creek	Payette				.14					T.	.06	.11	1.32	.85	.16	.44		.04	.31	.34	.04	.26	.21		.49	T.	T.		.18	.22	.26	6.03
Boise	Boise				.01					T.	T.	.20	1.24	.11	.45	.06		T.	.36	T.	.17	.11	.12		.25	T.			.07	.19	T.	3.34
Bonners Ferry	Kootenai																	.04		.49				.50	T.		T.		.11	.18	.05	1.37
Boulder Mine	Boise				.15	.16					T.		.79	.77		.42			.05	.30	.09	.21	.02		.50	.09			.20	.84	.43	5.02
Buhl	Snake																															
Caldwell	Boise				T.								.50	.05	.03	.40			.03	.03		.38	.02		.20				.14	.15	.03	1.96
Camas	Lost River Reg.									T.		.32		T.					.05	.01	.03	.02		T.	T.		.06	.03	.04	.21	.05	0.82
Cambridge	Weiser										T.				T.	.05	.05						.05	T.	.26				.33	.58	.20	1.52
Cedar Creek Dam	Snake				.09							.11	.27		.09			.32		2.00						.28			.14		.10	3.40
Chesterfield	Port Neuf				.20						T.	.05	.07	T.	T.				.05	.24		T.	T.		T.				.10	.15	.05	0.91
Clarks Fork	Pend Oreille				.34							.48						.01	.14					.07	.07				.11	.18	.08	1.48
Clyde	Lost River Reg.																															
Council	Weiser				.64	.01					.03	.07	.09	.13		.10	T.	.03	.02		T.	.18	.10		.33				.40	.86	.54	3.62
Culdesac	Clearwater											.87										.87			.73				.55			3.02
Deary	do				.40						.28			.30						.29			.02	.30					.26	.65	.20	2.70
Dent	do				.61	.03					.12							.24	.08	.23			.15		.33	.06			.30	.55	.10	2.80
Driggs	Snake					.25							T.	T.	.25		T.		T.	.15	.10	.10				.20						1.08
Emmett ‖	Payette					T.					T.	.10	.53	.48		.67	T.			.03		.08	.03	.02	.28	.09			.02	.15	.23	2.71
Forney	Salmon																															
Garden Valley	Payette				.17						.05	.30		T.		.10			.45			.07		.53			T.		.08	.57	.45	2.77
Garnet	Snake													.60						.90												1.50
Glenns Ferry	do											.05	.10	.22					.10	.07	.05	.15		.11	.22	.18		.12	.08	.15		1.60
Gooding	Wood-Malad				T.						.04	.03	.17	.16		.04			.11	.08	T.	.03			.11				.05	.11	.03	0.96
Grand Forks	St. Joe			T.	.53	.08					T.	.13		.05	.04				.30	.50				.12	.30	.09	.02	.03		.68	.50	3.37
Grandview	Snake										T.	.05	.20	.02	.25	.01			.43	.25	.27	.13			.06						.01	1.68
Grimes Pass ‖	Boise			.02	.09					.04	T.	.29	.66		T.	.09		.08	.07	.12	.25	T.	.02	.25	.30	T.			.64	.41	.12	3.45
Guffey	Snake			T.	.01					.04	.09	.09	.02	.21	.02	.03		.03	.91	.08	.15	.76	.02	T.	.12	.09			.06	.04	.14	2.91
Hailey	Wood-Malad										.43	.18	.58	.06		.12		.04		.07	.04	.12	.07	T.	.09	T.	T.		.11	.37	.05	2.33
Hollister	Snake				.02	.30					T.	T.	.35	.20		.08		.13	.09	.55	T.		T.		.18	.04			.05	T.		1.99
Hot Spring	Bruneau				T.						T.	T.	.80	.05	.17			.06	T.	.62	.45		.03		.12	.10				.10		2.50
Idaho City	Boise				.16									1.53		.18		.12		.19					.38						.91	3.47
Idaho Falls	Snake				T.	.01					.01		.13	.12	.04					.12	.26	.36				.77	.04	.01		.07		1.94
Indian Valley ‖	Weiser										.05		.15	.20		.23							.21		.12	.12			.02	.66	.20	1.96
Irwin	Snake																															
Kellogg ‖	Coeur d'Alene					.07						.18		.07					.20	.79			.03	.02	.33	.35		.09		.23	.43	2.79
Kirkham	Payette				.10							.05			.12					.15				.10					.08	.10	.75	1.45
Kooskia	Clearwater				.75	.25					.20	T.	.15	1.10	.05				1.05	.65			.55		.30	.15						5.20
Lakeview	Pend d'Oreille				.26	.05						.18		.03					.17	.18			.03	.05					.05	.28	.08	1.36
Landore	Snake				.14						.11	.08	.13	.34	.02	.32		.06	.01	.05		.11	.04	T.	.56	.11	T.		.35	1.05	.53	4.01
Leadore	Salmon			.01								.10				.05		.04	.05	.15				.10		.01			.10		.05	0.66
Lewiston	Clearwater			.26	.07	T.					T.	.11	.07	.08						.25			.03	.11	.24				.06	.38	T.	1.66
Little Camas	Boise					T.					.22	.18	.25	.03	.03			T.	.19	.16	.04	.08	T.		.37				.08	.40	.33	2.36
Loon Creek	Salmon				.06						.01	T.	.04	.37	.13	.05	T.		.08	.34	.13	.13	.20		.40	.14	.01		.01	.64	.28	3.02
Mackay	Lost Riv. Reg.										.20	.09	.33										.18		T.					.50		
Meridian	Boise				T.	.01					T.	.15	.04	.22	T.	.47			T.	.19	.02	.35	.03		.22	T.			.01	.18	.06	2.56

TABLE 2.—*Daily precipitation for April, 1912. District No. 12*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
***Idaho*—Continued.**																																
Mesa ‖	Weiser				T.						T.	.05	.08	.08		.18							.30	T.	T.	.28			T.	.18	.28	2.23
Middle Fork	Clearwater				.70	.10							.22	.90		.05		.02	.95	.80		.35	.70		.25	.45				.16	.40	6.05
Milner	Snake				T.	.23						.04	.20	.40				.03	.11	.53	.01				.19				.14		.15	2.03
Moscow	Palouse				.28	.04						.33		.03						.07					.27	.02			.03	.45	.25	1.77
Mountain Home	Snake												.44	.13		.11		T.	.05	.18	.22	.21	.02		.13					.27		1.76
Murtaugh ‖	do					.28						T.	T.	.55					.08			.85				.30					T.	2.06
New Meadows	Salmon																															
Nezperce	Clearwater												.60	.34					.12	.28			.42		.21	.11			.10	.40	.04	2.62
Oakley	Snake				.30						T.		.55	.15				T.		.70			.25									1.95
O'Hara Bar	Clearwater				.40	.15							.10	.45					.30	.35		T.	.70	*	*	*	.90			.10	.13	3.58
Orofino	do				.80	.13					.30	T.		.32				.31	.05	.30			.61	.05	.28	.01			.23	.64	.38	4.41
Payette	Payette				T.	T.					.08	.06	.20	.04	.01	.32			T.	T.		.23	T.		.43				T.	.15	.10	1.62
Pebble	Port Neuf																															
Pierson	Salmon									T.		T.	.62					.17	.38				.25		.21					.32	.28	2.23
Pine	Boise				T.					T.	.17	.22	.67	.03			T.	T.	T.	.14	.23	.11			.35			T.	T.	.57	.29	2.78
Pleasant Valley	do					.04					.02	.15	.79	.19	.04	.41				.12	.10	.24	.07		.14	.01			.13	.06	.10	2.61
Pocatello	Port Neuf				.34	.07					.02	.27	.40	.26		T.			.02	.48	.01	.03	T.		.09	.05			T.	.14	.02	2.20
Pocatello Nursery	do					.04					.11	.19	.40	.04				.03	.20	.42	.05		.06		.20	.10	T.			.11	.09	
Poplar	Snake					.18					.22		.46	.11			.02		.12	.16	.22	.11	.05		.08	.22				.20		2.15
Porthill	Kootenai											.28					.02	.09	.12	.01					.10					.16		0.78
Powers Ranch	Boise										.21	.70	.62			1.00		.16		.02	.10	.13	.07		.40				.25	.25	.32	4.23
Priest River Experiment Sta. No. 1.	Pend d'Oreille				.11	.09						.34		T.			T.	.02	.24	.47				.05	.04	.01	.01			.07	.56	.46	2.47
Priest River Experiment Sta. No. 2.	do				.11	.09					T.	.34		T.			T.	.02	.20	.47				.03	.06	.01	.01			.07	.55	.45	2.41
Priest River Experiment Sta. No. 3.	do				.11	.09					T.	.34		T.			T.	.02	.22	.48				.03	.05	.01	.01			.08	.57	.45	2.46
Pyle Creek	Payette				.04					T.			.35	.04		.32		.10			.11	.15	.03		.57	.03				.10	.54	.55	2.93
Rattlesnake Creek	Boise				.02	.05					.05	.02	.85	.68		.22		.07	.05	.17	.06	.15	.02		.50	.05	.01			.09	.39	.15	3.59
Richfield	Wood-Malad											.07	.20	.02		.05				.25	.01	.04			.07	.01				.01	.20	.02	0.95
Roseberry	Payette				.06						.09	.03	.03	.08		T.			.19		.03	.03	.05		.25	T.				.05	.25	.15	1.29
Roseworth	Snake				.02							.02	.25					.06	.03	.02			T.		.11	.09	.02			.06	T.		0.68
Ruby Creek	Boise				.06	.05					T.	.15	.58	.58		.39		.08	.02	.04	.09	.12	.05		.40					.15	.33	.40	3.49
Rupert	Snake					.32					T.	.13	.08	.12		T.		.02	.03	.20	.02		.01		.10						.03	.16	1.22
St. Anthony ‖	do													.19							.29	T.	T.			.09	.40			.09	.06	1.12
St. Maries	St. Joe				.27	.02					T.	.25		.02	T.		T.	.03	.21	.20				.09	.28	.01	.01			.05	.41	.19	2.04
Salmon	Salmon					T.									T.						.71			.06	.18						.35	.10	1.40
Sandpoint	Pend d'Oreille				.05	.07						.28						.10		.46				.05	.21	.05			.17	.44	.06	1.94
Sheep Hill	Boise				.05	.02					.02	.17	.31			.37		.10		.08	.06	T.			.26	T.				.12	.36	1.92
Shoshone	Wood-Malad																															
Silver City	Owyhee				.03	.02					.11	.03	.21	.06	.06		.02	.17	.35	.60	.07	.20	T.	T.	.21	.03			.06	.26	.07	2.56
Smith Prairie	Boise												1.19	.64		.16				.10	.09	.21			.44	.05	.07		T.	.09	.70	3.74
Soldier Creek	Wood-Malad				T.						.41	.54	.61	T.		.11		.04	.05	.07	.11	.07			.36		.13		.24	.72	.17	3.63
Spirit Lake	Pend d'Oreille			T.	.08	.01					T.	.12		T.			.02	.02	.40	.39				.05	.04	T.	T.	.32	.48	.12	.14	2.19
Springfield	Snake					.27						.62		.02					T.	.10			T.			T.	.22		T.	T.	T.	1.23
Sugar ‖	do											T.	T.	.15		T.	T.		.03	T.	.24		.07		.14		.20			.13	.05	1.01
Sunnyside	do							T.				T.	T.						T.	T.	.55	.75	.25		.18					.20	.02	1.95
Tripod Mountain	Payette				.05							.04	.94	.31		.50	T.	.12	.03	.17	.03			T.	.61				.71	.11	.30	3.92
Twin Falls	Snake				.07					T.	T.	T.	.10	.30				.01	T.	.62	T.				.25	.10			.07	.03	.13	1.68
Vernon	do										.10		.15		.15					.32	.20	T.	.12		.05	.31	.02	T.	T.	.23		1.65
Wallace	Coeur d'Alene			T.	.24	.02					T.	.12		.04				.10	.44	.75	T.		.11		.47	.23				.61	.35	3.48
Weiser	Weiser			T.	.01					.02	.18	.20	.03	T.	.32	T.	.03		T.	T.	.28	.02	T.	.10	.10			T.	.43	.06	.07	1.85
Wendell	Wood-Malad				T.						T.	T.	.10						.22	.32		T.	T.		.37	.15				.17	.05	1.38
Washington.																																
Aberdeen	Coast		.14	.25	.39					.21								.05	.06					.66	.13	.16	.03	.22	.11	.05	.14	2.60
Anacortes	Puget Sound				.13			.04			.11	.42						.06	.24			.01		.27	.02	.06				.19	.51	2.06
Baker	do			.18				T.			.58	.30	T.	T.				T.	T.	.14				.21	T.			T.	.22	.21	T.	1.84
Bellingham	do		T.	.02	.12		T.	.05			.45		.02					.49		.02				.26		T.	.12	T.	.02	.07	.40	2.04
Bellingham, near	do		.02	.01	.15						.18	.39						.02	.41					.24	.01				.05	.24	.47	2.19
Beverly	Columbia																															
Blaine	Puget Sound			.08	.08			.19			.02	.40						.10	.46	.02	.01			.24				.01	.38	.16	.54	.09
Blewett	Wenatchee										.60	.01		.20						.02	.01				.02				.03	.01	.01	0.91
Bremerton	Puget Sound			.10							.16	.26		.06					.24				.06	.14	.04	.15	.04			.47	.12	1.84
Brewster	Columbia		T.								.39	T.				T.		.05	T.	.10	.42	T.		.09					.23	.63	.09	2.00
Bumping Lake	Yakima																															
Cedar River	Puget Sound			.37	.53	.28	.22			.46	.53	.45	.08	.07				.09	.41	.07	.07	.21		.41	.05	.09			.39	.23	.41	5.42
Centralia	Coast		T.	.12	T.	.08								T.		T.	T.	.09	.04		.04	.13	.05	.70		.10	.02	.35	.30	.20	.35	2.57
Cheney	Spokane																															
Cle Elum	Yakima					.08					.75	.08		.14								.04							.09	.20	.16	1.54
Clearbrook	Puget Sound			.14	.18			.21			.12	.34	.02					.01	.41	.02	.03			.12	.07	.06		.20	.46	.29	.35	3.03
Colfax	Palouse				.04	.02						.07		.05				.08	.04	T.	.10				.24						.46	.30	1.40
Colville	Columbia										.21						T.	.06	.02	.11		T.		.04	.03	.03			.07	.07	.23	1.47
Conconully	Okanogan							T.			.36	.34		T.				.11	.06	.18	T.	.20	.02	.18			.02	T.	.34	1.03	.77	3.61
Cowiche	Yakima							T.			.16	T.							T.		T.	.03		.01					.01	.52	.21	0.94
Crescent	Spokane			T.							.16			.05				.09		.15									.06	.60		1.11
Darrington	Puget Sound			.26	.13			.21			.73	.23	T.	.11				.01	.02	.04		.01	.02	.12	.09			.08	.14	.26	.24	2.70
Davenport	Columbia																			.12										.60	.02	0.74
Dayton	do				.24						.07	.17	.29	.43						.03		.04		.09	.31				.11	.19	.27	2.24
Deer Park	Spokane					T.					.20	.10		T.				T.	.01	.27			T.	.02					.27	.87	.15	1.89
Detroit	Puget Sound		.05	.18	.05	.16		.11			.15	.05		.01				T.	.10		T.			.27	.34	.07		.01	.78	.20	.34	2.87
Dixie	Columbia			.05	.82	.39					.10	.22	.90	1.31					.01	.25	T.	.28		.28	.42				.38	.23	.62	6.26
Douglas Lake	Puget Sound				.09						.21	.43						.06	.26	.02	.03	.04	.01		.03	.07				.12	.20	.52	2.09
Dryden	Wenatchee																															
Duckabush	Puget Sound																															
East Sound	do																															
Ellensburg	Yakima													.03								.07								.40	.15	0.65
Ephrata	Columbia																															
Forks	Coast																															
Fort Simcoe	Yakima																															
Gerome	Columbia										.06	.08	T.	T.				.04	.02	.12		.04			.87				.22	.66	.87	2.98
Goat Lake	Puget Sound			.22		.45		.05	.02		.71	.64	.03	.20	.28					.07	.12			.41	.21	.12			.07	.13	.82	4.55
Gold Basin	do																															
Gold Creek	Yakima									.65	.40													.15					.10	.30		1.60
Goldendale	Columbia										.35													.38					.20	.08	.05	1.06
Granite Falls	Puget Sound			.14		.34		.19		.99	.20		.26	.45					.33	.05	.09	.08		.43	.15				.10	.55	.40	4.68
Grays River	Coast																															
Hanford	Columbia																T.											•	.12	.08	T.	
Hatton	do										.03		.11	.15				.02	T.	.02		T.						T.	.03	.36	.03	0.75
Huntsville	do											.17	.35	.38										.28						.70	.75	2.63
Irene Mountain	do					.01						.10		.02			T.	.27	.48	.49	T.		.06	.05			T.		.02	.30	.36	2.15

TABLE 2.—*Daily precipitation for April, 1912. District No. 12*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Washington—Contd.																																
Kennewick	Columbia										.08		.24					.06			.17	.08								.10		0.73
Kent	Puget Sound			.10	.11	.15		.17			.36	.38	T.	.03				T.	.40	.04	.01	.07	T.	.02	.44	.02			.34	.11	.25	3.00
Kettle Falls	Columbia											.24							.05	.09				.04					.17	.38	.07	1.04
Kiona	Yakima																															
Kosmos	Columbia			.09	.20	.09		.02			.02	.07	.03	.02			.03	.08	.33	.08	.03	.14		.12	.02				.09	.16	.11	2.33
La Center	do		T.	.45	.01		.07				T.		T.				.02	.25	.01		.11		.25	.20		.11		.52	.37	.22	.11	2.70
La Crosse	Palouse			T.	T.						.01	T.	T.	.19				.02	T.	.04				.16	T.				.03	.30	.20	0.95
Lake Clealum	Yakima			T.		T.					.02	T.	T.	.02							T.	.02	T.	.16	T.				.08	.22	.08	0.60
Lake Kachess	do			.05	.02	.12		.03			.49	.05	T.	.22				T.	T.	T.				.11		T.		.01	.06	.30	.16	1.62
Lake Keechelus	do			.18	.07	.12					.62	.06		.15					T.		.06			.12	.06			.06	.14	.45	.27	2.36
Lakeside	Columbia										.31	.03		T.				.01		.01	.01	T.	.04	.04	T.			T.	.02	.32	.08	0.87
Laurel	do										.45													.08					.24	.78	.14	1.69
Laurier	Kettle				T.	.04					.01	.37							.16	.21	.05			.14	.01			.03	.01	.27	.31	1.61
Lester	Puget Sound			.15	.15	.25	.10				.90	.25	.35	.25						.50	.08			.12			.30			.25	.30	3.95
Lone Tree	Coast		.58	.12	.28	.08		.26					.01	.01			T.	.15	.11	T.		.07	.02	.25	T.	.34	T.	.31	1.15	.43	.88	5.05
Longmires Springs	Puget Sound																															
Lost Creek	Columbia					T.						T.		.01	T.			T.	.01	.02	.01			T.				T.	T.	.04	.01	0.10
McConihe	do							T.			.02		T.	.02				T.	T.	.03		.01	T.	T.					T.	.16	.07	0.31
McCumbers Ranch	do										.35													.10					.20	.30	.05	1.00
Moses Lake	do								.03					.03															.17		.12	0.35
Mottinger	do				T.					.40	.04	.34								T.		.17			T.	T.			T.	.19	.05	1.19
Mount Pleasant	Coast		T.	T.	T.	.14		T.										T.	T.	.11	.04	.06	.02	.11	T.	.16	T.	.02	T.	.02	.63	1.31
Moxee	Yakima				.01						.15			T.								.16		.03	T.					.35	.04	0.74
Newport	Pend Oreille				.06	T.					.04	.25		T.					.17	.25				.08	T.				.12	.63	.15	1.75
North Head	Coast		.08	.14	.26		.04	.26			.01		.02				.11	.12	.04	.01				.27		.10		.13	.59	.43	.58	3.19
Northport	Columbia				.02					.01	.34	T.						.50	.22	.01		.02		.12	T.			.02	.24	.21	.02	1.73
North Yakima	Yakima				T.						.18	T.	T.	T.								.07		.01	T.				T.	.32	.05	0.63
Nutland	Columbia										.69	.14	.20											.03					.12	.08		1.26
Odessa	do										T.	.03						.02	.06	T.		.05		T.	T.				.07	.40	.02	0.74
Olga	Puget Sound				.17			.05				.47							.34					.21					.12	.08	.65	2.09
Olympia	do		T.	.08	T.			.11			.02						.25	.02						.48	.23	.05		.08	.58	.38	.40	2.68
Omak	Okanogan										.11										.08			.12					.22	.41	.30	1.24
Oroville	do			.05							.40								.23	.12				.15					.05	.30	.80	2.10
Parker	Yakima																															
Peola	Snake			.01	.23	.03				T.	.12	.22	.03	.21				.61		.13		.02	.03	.02	.43				.06	.10	T.	2.25
Pomeroy	do									.35	T.		.02	.40						.04				.05	.41				.05	.18	.15	1.65
Port Crescent	Coast		.01	.19	.10		.01	.09									.01		.12		.06			.06	.01	.01		.04	.04	.21	.14	1.10
Port Townsend	Puget Sound			.06	T.		.05				.03	.08							.05	.03	T.			.27	.02					.25	.50	1.34
Pullman	Palouse			.13	.02						.16			.02						.09					.48			.10	.53	.27		1.80
Queets River	Coast		.22	1.26	.28	.09	T.	.37		T.		T.	T.	.01			T.	.05	.32	.03		.02		.34	.07	.21	.04	.32	2.70	.35	.91	7.59
Quinault	do		.28	1.20	.01	.11		.56					.06				.12	.40	.03	.19				.56	.04	.40	.12	.60	1.90	.58	.70	7.86
Republic	Kettle										.07	.14						.02	.46	.16	.03	.35	.11	.18	.02		.01		.01	.52	.08	2.16
Rex Creek	Columbia		.01							.65	.05												.15					T.	.45		1.31
Ritzville	do										.05			.02				.06	.17	.01									.02	.43	.08	0.84
Robertsville	do																															
Rock Lake	Palouse																		.10	.14				T.					.04	.56	T.	0.84
Rosalia	do				.05					.04	.07	T.		.02						.10				.13					.06	.26	.04	0.77
Russels Ranch	Yakima			T.				.02		.45			T.						T.			.09		.05				T.	.06	.28		0.95
Seattle	Puget Sound		T.	.03	.12			.07			.36	.07	.02	.02				.14	.08	T.	.04	.04		.20	.01	T.		.04	.31	.18	T.	1.73
Sedro Woolley	do			.10	.13						.48			.61							.25			.21	.08			.04	.14	.13	.75	2.92
Sixprong	Columbia										.28	.02	.24						T.		T.	.12							.07	.10	.05	0.88
Skagit Power Dam	Puget Sound			.21	.07	.22		.06			.97	.18		.05						.10				.23	.14				.17	.26	.09	2.75
Snohomish	do										.60	.50		.30					.30	.20			.10						.60	.30	2.90
Snoqualmie Falls	do			.28	.32	.40		.14			.83	.35	.01	.26				.04	.44	.07	.01	.15		.35	.08	.05		.04	.14	.34	.20	4.50
Snoqualmie Pass																																
Snyders Ranch	Columbia							T.			.45	.25		.01				.53		T.	T.			.12					.81		2.16
South Bend	Coast		.05	.28	.19			.47						.01				.24							.18	.04	.03	.02	.47	.46	.76	3.20
Spokane	Spokane			T.	T.	T.				.01	.10			.04		T.	T.	.02	T.	.22			T.	T.	T.		T.		.22	.32	.01	0.94
State University	Puget Sound			.06	.04	.20		.09			.09	.54		.05	T.			.03	.28	.01	.03	.11		.22	T.				.37	.14	.18	2.44
Stokes Ranch	Columbia							T.			.30	.25		T.	.07			.11		T.	.08		.09	.14					.89	.12	2.05
Sumner	Puget Sound			.13	.17	.06		.17			.48	.37	.01	.04				T.	.48	.07	T.	.13		.32	.02	.02		.02	.27	.07	.35	3.18
Sunnyside	Yakima				T.						.19		.06	T.								.19		.05					.06	.05	.01	0.61
Tacoma	Puget Sound		T.	.16	.11			.09			.48	.01	T.	.03				T.	.16	T.	.03			.41	.03	.01		.16	.40	.36	.07	2.51
Tatoosh Island	Coast		.25	.44	.38		.03	.10						T.		T.		.03	.05				.01	.35		.19	.02	1.02	.83	.46	.08	4.24
Tieton	Yakima							.02			.43	T.	.01		T.							.06	.04	T.					.07	.52	.03	1.18
Tonasket	Okanogan																															
Touchet	Columbia			T.		T.					T.	T.	.72					T.	T.	T.	.17	T.		.02	.11				.04	.05	.16	1.27
Touchet Ridge	do				.40	.25					.25	.30	1.30	1.10						.15	.52	.16		.30	.65				.30	.38	.85	6.91
Trinidad	do										.10		T.	.20							.22								T.	.24	.06	0.82
Vancouver	do			.36	.04			.02			.02		.04				T.	.24	.03		T.	.08		.17	.02	T.		T.	.52	.22	.09	1.85
Vashon Island	Puget Sound	T.	T.	.12	.05	.10	T.	.14	T.	T.	.27	.31	T.	.05	T.	.01	T.	.01	.23	.01	.05	.03	T.	.34	.05	.26	.01	.04	.38	.34	.02	2.82
Wahluke	Columbia										.03		.05	.39						T.		T.							.10			0.57
Wallace	Okanogan							.04			.41	.45		.02		.02			.25	.43		.37	.01	.19				.03	.26	.71	.89	.94	5.02
Walla Walla	Columbia			.08	.17	T.					T.	.07	.81	.07						.04		.01	.01	.19	.23				.02	.30	.07	2.07
Washougal	do			.12	.20			.15		.38								.58	.40	.10				.25	.10				.45	.55	.40	3.68
Waterville	do										.95	.05			.03					T.	.09	.05	.14					T.		.32	.04	1.67
Wenatchee, near	do										.26			.20	.04					T.	T.	.35		.07						.28	T.	1.20
White Salmon	do					T.				T.	.35													.04			.02	.01	.11	.17	.05	0.75
Wilbur	do			T.							T.			T.								T.		T.						.04	.12	0.16
Wind River	do			.02		.23		.02			.36							.03	.11			.08	.01	.11		.08			.53	1.25	.65	3.48
Winthrop	do										.18	.19	T.					.07		T.	.11	.02		.10			T.	T.	.10	.80	.04	1.61
Yacolt	do			.18	.38	.10	.12				.17							.13	.32			.18		.34	.05	.08			1.10	.70	.37	4.22
Yale	do		.02	.33	.35	.23		.15			.13							.16	.22		.02	.12		.33		.08		.07	.92	.66	.24	4.03
Zillah	Yakima																															
Oregon.																																
Albany	Willamette			T.	.36		T.	.06		T.	.06	.01	.01				T.	T.	.26			.02	.20	.24	.13	.05		.32	.15	.42	2.29
Allingham	Deschutes									.11	.49	.02	.13						T.		T.			.10	.17				.01	.15	.65	1.83
Ana River	SE. Drainage										.02	.12		T.			T.		.01	T.	.01	T.			.16		.18			.30	.02	0.82
Ashland	Rogue			.03	.06					.43	.89	.50	.53	.15	.02				.17	.08		.31	.06	T.	.36	.15	.22			.37	.48	4.81
Astoria	Columbia		.01	.23	.03	.40		.11			T.		.03				.02	.10	.17	T.				.29		.18	T.	.03	.72	.48	.73	3.53
Austin	John Day				.08						.67	.14			.22			.30	.05	.01	.12	.15	.02		.12				.06	.11	.14	2.19
Baker	Snake			T.	.01						.13	.01	.04	.09		.07	T.	.04			.01	.25		T.	.17		T.		.04	.10	.09	1.05
Bay City	Coast		.01	.09	.07	.24	T.	.24			.01	.05	.18	T.				.12	.75	.07	.02			.32	.04	.24	.03	T.	1.54	.50	.22	4.74
Bear Creek	Deschutes										.09	.07	.06					.80		.07	.03	.22			.25			.10	.12	1.40			2.85
Bear Valley	SE. Drainage											T.	.31		.62				.49		.09	T.			.04					.10	.02	1.67
Beech Creek	John Day										.65		.40					.28	.35	T.	.22	.11			.50				.15	.20	.24	3.10
Bellfountain	Willamette				.02			.03			T.	T.						.01	.01	.23	.04	T.			.30	.33	.05	.09		.36	.57	1.06	3.10
Bend	Deschutes			T.							.66	.04	T.		.06				T.						.45					.03	.50	1.74
Big Basin	John Day									T.	.70	T.						1.00	T.	.02		T.	T.	.08	T.	T.	T.	1.00	T.	T.	2.80
Black Butte	Willamette				.20		.35				.50	.25	.25						.90					.60	.50	.10			.50	1.00	.90	6.05

TABLE 2.—*Daily precipitation for April, 1912. District No. 12*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Oregon—Continued.																														
Blalock	Columbia										.49													.03					T.	.06		0.58
Blue Mountain Sawmill.	Umatilla				.57	.17					.20	.40	1.15	.70					.20	.30	.25	.20		.05	.60	.15		.20		.20	.40	5.74
Brogan	Malheur									.20			.50			.25	.05												.16		1.16
Buena Vista	Snake				.01						.08	.01		T.			T.					T.		.02	.02				.02	T.	0.16
Burns	SE. Drainage										.40			.61			.05	.21		.06	.05			.02	.03	.02	.12	.12		.16	.12	1.97
Burns Mill	do										.56			.55			.20			.08		.10		.04	.02	.05	.15	.14			.60	2.49
Butte Falls	Rogue				.02						1.10	.45	.29	.06					.22			.25		.04	.37	.07	.20		.02	.27	.45	3.81
California Gulch	Umatilla				.45					.50				2.25					.45		.50	.27			.60						.24	5.26
Canyon City	John Day																															
Cascade Locks	Columbia				.16	.10	.02	.04			.51		T.					.09	.26	.04	.03			.20	.08	.16		T.	.35	.70	.28	3.02
Cascadia	Willamette			.02	.24			.19			.73	.07	.74					.19	.94	.10		T.		.20	.50	.02			.20	.31	.68	5.13
Cazadero	do				.40	.70					.40		.02					.19	.86	.06		.03		.12	.23	.08	T.	T.	.30	.36	.43	4.18
Christmas Lake	SE. Drainage				T.						.06	.02	T.	T.	.04				.03		T.	.08		T.	.28	T.	.10		.20	.33	.02	1.16
Cliff	do										.14	.07		.04	.12		T.		.09		.03				.31		.07		.10	.30	.12	1.39
Columbia Mine	Snake										.47	.17	.10	.05					.36		.30	.41		.05	.15	.18			.21	.41		2.86
Condon	John Day																															
Coquille River Lighthouse.	Coast				.16			.29					.16					.05	.52	.05		.43		.49	.80	.09			.30	1.40	.93	5.67
Cornucopia	Snake				.19						.31	.11	.18	.21		.68		.13	.04	.13	.02	.19	.04	.03	.32	.02			.72	.61	.63	4.56
Corvallis	Willamette				.25	T.		.02	T.		.15							.15	.04				.05	.23	.12	.26		T.	.33	1.31	.35	2.26
Cracker Creek	Snake	T.		T.	T.						.04	.02	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.		T.	.02				1.01	.03	.02	1.14
Crescent	Deschutes			.01	.01						.51	.05		.03	.04		.01		.13					.05	.30	.01	.06		.01	.10	1.00	2.32
Dayville	John Day			T.	T.			T.		T.	.67	.03	.22		.15			.45	.68		.03	.08			.41				.04	.12	.34	3.22
Deadwood	Coast				.05			.19			T.			T.			.06	.04		.04		.10		.63	.40	.29		T.	.71	1.32	1.03	4.86
Diamond	SE. Drainage										.36					.22		.21	.20		.08	.07	.38		.20		.03		.01			1.76
Doraville	Columbia		.01	.13	.06	.13		.02			T.	T.	.02				.03	.01	.22	.01	.02	.02		.23	.04	.09	.01	.08	.33	.82	.11	2.39
Drain	Umpqua				.08			.11			.11	.18	.44	.01			.03		.52			.17	T.	.20	.44	.10	.15	T.	.12	.67	1.27	4.60
Dufur	Columbia							.01			.39						T.		.05		T.	.01		.01		.01		T.	.22	.16	.01	0.87
Duncan	Umatilla					.20				.60		.50	.90				.10		.20	.20		.30	.01	.20		.01				.60	.10	4.51
Echo	do				T.						.24	.02	.42						.19		.06	T.		.08					.01	.02		1.04
Ella	Columbia										.40		.52						.35	T.	.10			T.	.12				.05		.32	1.86
Embody	SE. Drainage										.05	.17							.06		.02	.12		.08	.26	.12				.07	.84	1.79
Eugene	Willamette				.19			.07			.18	.07	.18	.02				.18	.35	.13	.03	.04	.33	.15	.38	.14	.15		.06	.09	.58	3.32
Fairview	Coast																															
Falls City	Willamette																															
Fir Glen	Coast				.04			.05			.07	.30	.06	T.				.08	.68	.10	.32	.27	.02	.09	.27	.20	.03		.04	.94	1.72	5.28
Florence	do			.08	.05			.12									.02	.22	.61	.11	.04	.10		.57	.49	.20	.15	.22	.38	.76	.84	4.96
Forest Grove	Willamette			.15	.42												.06	.06	.10		.10	.26					.32	.39	.27	.51		3.24
Fort Rock	SE. Drainage										.14	.03							.15							.33	.04				.65	1.34
Galice	Rogue				.02			.12			.08	.46	.06	T.					.39	.06	.21	.05		.15	.31	.05	.04		.29	1.35	2.38	6.02
Gardiner	Umpqua																															
Gibbon	Umatilla																															
Glencoe	Columbia	.03			.06						.29		.39						.21						.13				.03			1.14
Glendale	Umpqua	T.				T.	.08	.09			.10	.12	T.	.18									.40	.60	.35	.73	.10	.01	1.01	.97	2.00	6.74
Glenora	Coast		.02	.25	.13		.45	.20			.05				.05		T.	.30	.34	.07	.02			.04	.20	.60		.40	.60	1.01	.80	5.53
Gold Beach	Rogue							.50				.40	.05						.05	1.00	.04	.50	.80		.40	.20	.30	.30	.60	1.40	2.60	9.14
Golden Falls	Coast				.08			.28			.10	.21	.31	T.			.01	.10	1.22	.11	.16	.57		.27	.46	.18	.02	.01	.30	1.82	1.23	7.44
Grande Ronde	do			.01											.40							1.00							1.00	T.	2.41
Grants Pass	Rogue							.11		T.	.16	.37	.14						.18		.03	.13		.24	.19	.03	.08		.02	.73	1.73	4.14
Grass Valley	John Day										.37	.17												.30				.15			.27	1.26
Greenhorn	Snake			.01	.05						.80	.06	.19	.03	.02		.38	.55	.05	.07	.02	.18	T.	.02	.30	.08	.01		.07	.36	.43	3.68
Gumboot	do				.35						T.	.05	.25	.22		.72		.16		.09		.09			.15	.04			.40	.85	.37	3.68
Gurdane	Columbia									.13	.15					.02	.07	.15	.67	.12	.12	.28			.21				.16	.14	.29	2.51
Hampton	Deschutes			.01	.02					T.		T.		.05							.02					.04			T.		.04	0.18
Happy Home	Umpqua				.10			.60	.04	.20	.80	.40	.34	.40					.68	.24		1.20	.60	.20	.80	.08	.10		.62	3.84	1.10	12.34
Harbor	Columbia																															
Hay Creek	Deschutes			.06	.02						.74		.04						.16		.15	.09		.05	.14				.15	.21	.21	2.02
Hazeldell	Willamette			.17		.07				.31	.09	.53							.28		.21		.08	.33	.09			T.	.20	1.03	.96	4.97
Headworks	do			.10	.29	.12		.14			.80		.20					.40	.86	.15	.03	.05		.19	.07	.10	.02		.45	.60	.31	4.88
Heppner	Columbia			.15	.11	T.				T.	.59	.02	.73						.46		.08	T.		.12	.08			T.	.15	.02	.04	2.55
Hermiston	Umatilla										.21	.02	.20						.05		.05	.01		.01	.03					.07	.02	0.67
Hermoso Rio	Deschutes									*	.54													.05	.10				.10	.25	.33	1.37
Hilgard	Grande Ronde			.30							.40	.20	.40						.10	.10	.05	.10			.60				.10	.60	.15	3.10
Hood River	Columbia										.20													T.		T.			.15	.20	.20	0.75
Hood River No. 2	do										.36									T.									.10	.60	.15	3.10
Hood River No. 3	do										.29													.02	T.			.15	.11	.17	.05	0.64
Hood River No. 4	do						T.				.35								T.					T.		T.			.15	.13	.06	0.60
Hoover	Willamette				.25	.10		.16			.85	.25	.41	.04				.05	.41	.42		.10	.02	.22	.42	.22	T.		.24	.57	.60	5.33
Howardville	Grande Ronde				.41	.03					.15	.09	.80	.16			.11	T.		.13	T.	.28			.62	.11			.03	.15	.28	3.35
Huntington	Snake										.04	.03	.15		.75							.02			.01				.15	.04	.01	1.20
Ibex Mine	John Day			T.	.03	T.					.76	.20	.42	.13	T.		.01	.17	.16	.24	.12	.20	T.	.02	.17	.24	T.		.08	.33	.16	3.44
Ironside	Snake									.35	.35	.03	.08			.20	.05	.10		.05		.18								.25	.15	1.79
Jacksonville	Rogue			T.	T.					.14	.85	.30	.95	.03				T.	.25		.26	.04		.04	.17	.12	.13			.61	.61	4.50
Joseph	Grand Ronde				.34						.10		.60	.20		.34		.04	.06	.20	.10	.10			.04					.60	.13	2.85
Klamath Agency	Klamath											.30																	.01	.40	0.71
Klamath Falls	do										.43	.31		.15											.22	.05	.20			.07	.06	1.49
La Grande	Grand Ronde				.28						.59	.16	.52	.07			.13	.01	.02	.09	.05	.25		.02	.49	.33	.02		.07	.08	.15	3.03
Lakeview	Pitt																															
Lilyglen	Rogue			T.	.06					.20	.71	.07	.21	.15	.12				.50	.06	.11	.14	T.	.15	.44	.22	.14		.13	.37	.03	3.81
Long Creek	John Day			T.	T.			T.		T.	.48	.02	.57	T.	.04		.01		.36	.02	.05	.11		T.	.42	T.	T.	T.	.02	.01	.04	2.15
Long Valley	Pitt				T.					T.	.28	.18	T.	.11	.06		.11		.04		.01	.01		T.	.40	.01	.16		.22	.41	.12	2.12
McKenzie Bridge	Willamette			T.	.18			.14		T.	1.19	.05	.34	.02			T.	.09	.33	.14	.02	.10		.36	.29	.15	.02	.05	.31	.66	.88	5.35
McMinnville	do			.20	.44	.07		.10			T.		T.				.09	T.	.08		.01	.04		.43	.10	.11	.01	T.	.62	.47	.27	3.04
Marshfield	Coast				.12		T.	.26		.02	T.	.02	.25					T.	.69	.12	.25	.20	T.	.83	.76	.09	.09		.35	1.34	.99	6.38
Maury	Deschutes										T.	.05			.18			.06	.40	.18	.10	.26			.28	.16			.30	.12		2.09
Meacham	Umatilla				T.						.50	.90							.60	.30	.20			.50		.70				T.	.90	4.60
Meadow Brook Ranch.	Columbia										.33	.01												.05		.05			.18	.20	.10	0.92
Medford	Rogue							T.		.10	1.31	.14	1.47	.23	T.				.10	T.	.15	.10	.10	T.	.18	.08	.16		T.	.22	.06	4.40
Merrill	Interior Drainage.																															
Metolius	Deschutes			T.							.35		.05					.03							.15	T.			.02	.06	.14	0.80
Mikkalo	John Day										.47		.28						.08					.13						.12	.03	1.11
Miller Prairie	do										.35		.40						.60		.10	.05			.10							1.60
Miramonte Farm	Willamette			T.	.46	.06		.05			.06		.06					.08	.30			.04		.11	.17	.02			.48	.48	.14	2.51
Monroe	do							T.					T.				T.	T.	.28	.01				.28	.44	.07	.26		.31	.44	.82	2.71
Mountain Home	Columbia			.11		.15		.14			T.	T.					.14	.04	.41	.02	.02			.36	.07	.03		.05	.11	.41	.26	2.32
Mount Angel	Willamette				.46			.11										.17	.35	.03				.23	.17	.11			.40	.40	.50	2.92
Mount Hood	Columbia																		.05				T.						.18	.18		0.41
Mountain Ranch	Rogue							.30	.10	.20	1.00	.30							T.			.15		.65	.30	.10	.15	.18	.05	1.00	2.00	6.48

TABLE 2.—*Daily precipitation for April, 1912. District No. 12*—Continued.

Stations.	Watershed.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Oregon—Continued.																																
Musick	Umpqua				T.			.20	.05		.75	.30	.24	.20					.80	.39	.57	.31		T.	1.00	1.00	.50		.05	1.05	2.70	10.11
Newport	Coast			.09				.34										.06	.54	.02		.22		.43	.61	.09	.10	.38		.56	.42	3.86
Ochoco	Deschutes			.10	.05					T.	.34	.04		.01	.12		T.		.37		.16	.17		T.	.40	T.	.07		.14	.27	.22	2.46
Ochoco Creek	....do			.40							.33			T.	.20				.13	.07	.12	.08			.32			T.		.25	.40	2.30
Odell	Columbia										.35																				.45	0.80
Ortley	....do									T.	.50																		.30	.60	T.	1.30
Owyhee	Owyhee									T.				.23	.10	.66			.12	.02		.15			.25						.09	1.62
Paisley	SE. Drainage											T.		T.																.89	.41	1.30
Parkdale	Columbia							.05			.51								.07	.02					.01	T.			.21	.20	.10	1.17
Pendleton	Umatilla				.13						.17	T.	.61	T.					.05	T.	.13	T.		T.	.45				.03	.02	.41	2.00
Persist	Rogue				.20							T.	.45	.35	.26			.40	.10			.40		.12	.60	.10			.01	.75	1.50	5.24
Pilot Rock	Umatilla			T.	.47						.22	.04	.88						.10		.26	.08		.03	.40		.05	T.	.10		.30	2.91
Pompeii	Columbia				.25	.27					1.05		.20					.10	.20	.60			.10		.10	.15			.10	.25	.40	4.47
Portland	Willamette		T.	.48	T.	.02		.04		.01	.01	T.	T.				.05	.13	.14		.11			.19	.05	.01		.07	.40	.24	.09	2.04
Port Orford	Coast																															
Post	Deschutes										.21	.08			.09			.13	.21		.06	.25			.63	.07		.05	.03	.13	.23	2.17
Prairie City	John Day				.06	T.					.78	.03	.40	.01	.09	.05	.38	.43	.27	.12	.26	.14	.02		.31		T.		.06	.10	.12	3.63
Prineville	Deschutes				.08					.25	.10	T.			.08										.52	.07	T.				.53	1.63
Prospect	Rogue																															
Rager Creek	Deschutes										.65	T.			.40		.01	.50	.35		.05	.10			.45		.03		.28	.07	.15	3.04
Ramsey	Columbia							T.		T.	.33								T.					T.		.01			.12	.32		0.78
Range	John Day										.60	.10	.70	.30	.05				.30	.10	.15	.30		.20	.50	.10			.10	.10		3.50
Ray Creek	Columbia			.32	.03	T.		T.		.03	.32	T.	.39					T.	.26	T.	T.	T.		.05	.12				.06	T.	.02	1.60
Redmond	Deschutes																															
Reston	Umpqua				.03			.04			.08	.30	.03					.02	.60	.12	.29	.24	.02	.05	.10	.30	.05	.01	.05	.01	1.76	5.10
Richland	Snake				T.						T.	T.				.25						20			T.					T.		0.45
Riverdale	Deschutes										.28	.05	T.	.06	T.	T.	.04	.16	.02	.02	T.	.12	.05	.50	.05	T.	T.		.13	.14	.29	1.91
Riverside	Malheur										.75		.10		.15	.05	.08		.50	.50			.08	.20					.08	.20	.18	2.87
Rock Creek	Willamette																		.70				T.	.33	.30	.25			.62	.78		2.98
Roseburg	Umpqua				.07			.17			.04	.36	.44					T.	.05	.24	.01	.05	.03	.01	.12	.41	.09		.02	.11	.65	.99	3.86
Rosland	Deschutes			.05						.03	.40	.05	.10	T	.38				.18					.05	.26	T.		T.	.10	.11	1.45	3.16
Salem	Willamette			T.	.40	T.		.03			.02								.12	T.		.03		.23	.18	.02		T.	.31	.27	.32	2.03
Seneca	SE. Drainage				T.						.56		.10		.26	.07	T.	T.	.10	.10	.08	T.			.20					.60	.10	2.17
Silver Lake	....do										.10			.04							.20	T.	.05		.55		.18			.01	.21	1.34
Siskiyou	Rogue										.88	.54	.45	.19	.06				.54	.08	.12	.07	.07		.37	.30	.06			.86	.44	5.03
Sisters	Deschutes									.03	.47	.10	.33						.04					.08	.17		.02			.12	.60	1.96
Sparta	Snake				.12						.05		.10	.15		.03		.20				.27								.67		1.59
Stafford	Willamette				.52	.06		.05			.05						.04	.08	.25	.01	.02	.09		.12	.14	T.	.01		.50	.25	.28	2.47
Starkey	Grande Ronde										1.00	.25	.30							.14		.50			.60					T.	.50	3.29
Summit	Willamette			.06				.21			.01		T.				.03	.09	.24	.03		.03		.45	.40	.07	.07	T	.41	.54	.61	3.25
Summit Prairie	Deschutes									.02	.26	T.			.25			.44			.02	.16		.05	.58					.26	.36	2.40
Susanville	John Day			.06	.01					.27	.25	.50	.45	T.			.50		.40	.05	.30	.06			.25	.30				.20	.35	3.95
Tamarack	....do				.25					T.	.81	.07	.15					.11	.38		.05	.05			.10				.05	.25	.10	2.37
Telocaset	Snake											.01	.05					.02		.01		.02			.01				.05	.01	.03	0.21
The Dalles	Columbia							T.			.16	T.												T.					.06	.06	T.	0.28
Tinroof	Umatilla																															
Toledo	Coast						.30						.10							.30		.70		1.00		.30		.20	.30	.70	1.10	5.08
Trail	Rogue				.02					.13	.47	.36	.27	.04					.22	.01		.35	.05	.02	.45	.16	.07		.04	.47	.65	3.78
Trask	Coast																															
Umatilla	Columbia							T.			.40		.23							.09	.01	.03		.04	T.				.35	.05	.14	1.34
Union	Grande Ronde				.07						.27	.15	.16						.03	.05		.15			.40	.01			.03	.08	.02	1.42
Vale	Malheur										.10	.04	.08		.04	.50		.02	.17	.02	.02	.17			.20	.01			.09	.10	.06	1.62
Valley Falls	SE. Drainage									.14	.03	T.		.02		.08		.02	.06		T.	.20			.08	T.	.20			.24		1.07
Van	Malheur										.80	T.	T.		T.	.04				.55										.50	.50	2.39
Vida	Willamette				.29			.18		T.	.76	.11	.61	.16			.01	.08	.81	.02	T.	.18		.12	.62	.25	.01	T.	.20	.60	.76	5.86
Wallace Orchard	....do			.04	.34	T.		.05			.07						.12	T.	.21	.02				.29	.15	.04			.54	.44	.49	2.80
Walloupa	Grande Ronde				.23	.01						.34	.72	.23				.20	T.	.05		.16	T.	T.	.56	.04			.03	.23	.41	3.21
Wallowa	....do			T.	.22						.08	.02	.51	.13			T.	.17	.02	.07	.01	.07			.46	.04	T.		T.	.10	.21	2.11
Wamic	Deschutes										.20												T.	T.					T.	.16	T.	0.36
Warmspring	....do									.36		.02												.06	.06						.16	0.66
Wasco	Columbia										.51												.04						.30	.05	.12	1.02
Welches	....do			.02	.51	.09		.02		T.	.76	.02	.39					.20	.71	.27	.19			.21	.06	.21		.12	.51	.63	.59	5.51
Westfall	Malheur																															
Weston	Walla Walla			.22	.08					T.	.15	.48	.92						.26	.13		.08		T.	.50			T.	.14	.28	.28	3.52
Williams	Rogue							.12			.22	.33	.53	.10	.02				.45	.15	.20	.05		.05	.20				.05	1.02	.70	4.19
Yonna	Inte'r Drainage										.55	.21	.05		.15										.25		.25	T.		.30	.10	1.86

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations, April, 1912. District No. 12, Columbia Valley.*

Date.	Montana.				Afton, Wyo.		Idaho.																			
	Kalispell.		Missoula.				Boise.		Bonners Ferry.		Hot Spring.		Lewiston.		Mackay.		New Meadows.		Pocatello.		Salmon.		Shoshone.		Vernon.		Wallace.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	62	32	65	26	49	17	67	36	65	39	71	30	71	36	57	25	.....	.....	59	30	50	26	.....	.....	45	15	64	31
2....	66	32	70	25	49	15	73	37	69	27	70	37	77	38	57	28	.....	.....	61	39	59	28	.....	.....	46	19	71	32
3....	60	34	64	32	53	16	68	47	55	35	70	50	65	45	64	27	.....	.....	63	44	64	28	.....	.....	51	22	59	31
4....	55	39	58	38	52	29	57	45	64	28	64	47	56	46	59	34	.....	.....	54	38	61	34	.....	.....	44	31	47	36
5....	45	31	46	34	50	33	54	33	58	20	62	39	56	37	50	31	.....	.....	49	37	52	32	.....	.....	47	31	47	32
6....	51	24	59	20	44	17	63	35	57	27	67	30	69	31	51	17	.....	.....	55	27	64	23	.....	.....	44	14	59	24
7....	64	30	74	28	49	15	72	43	71	27	78	43	72	42	58	21	.....	.....	65	37	70	27	.....	.....	45	20	66	32
8....	64	32	74	30	49	19	76	45	63	28	79	50	74	39	62	29	.....	.....	69	33	69	31	.....	.....	50	25	72	31
9....	70	32	76	31	53	20	76	44	69	34	83	43	77	41	62	44	.....	.....	68	38	71	32	.....	.....	50	28	74	33
10....	73	36	61	32	46	26	64	42	55	37	52	48	60	45	57	31	.....	.....	52	38	58	33	.....	.....	45	30	58	38
11....	54	38	64	36	52	19	50	36	54	36	60	37	65	41	49	30	.....	.....	52	38	55	30	.....	.....	47	31	60	35
12....	60	33	57	32	49	19	43	37	66	37	50	40	52	43	36	29	.....	.....	47	33	52	29	.....	.....	43	28	62	32
13....	52	37	48	38	41	28	49	34	51	32	57	37	49	37	46	29	.....	.....	59	31	54	30	.....	.....	39	29	41	36
14....	55	33	53	36	46	26	55	32	58	25	59	30	63	33	47	23	.....	.....	51	33	60	31	.....	.....	43	28	54	31
15....	56	38	57	28	42	17	50	33	62	26	61	32	63	37	47	25	.....	.....	50	32	61	34	.....	.....	47	24	58	29
16....	58	33	54	34	45	23	58	34	62	21	64	30	68	37	47	24	.....	.....	54	33	60	32	.....	.....	42	25	58	36
17....	54	35	56	32	46	19	56	40	62	26	64	32	63	40	.....	.....	.....	.....	54	29	57	31	.....	.....	52	23	54	32
18....	57	34	43	36	40	17	50	35	53	34	66	30	58	37	.....	.....	.....	.....	46	35	58	29	.....	.....	44	33	42	37
19....	57	37	54	36	37	20	44	36	60	37	67	32	49	36	.....	.....	.....	.....	35	25	65	30	.....	.....	51	26	42	32
20....	60	32	57	32	38	14	48	33	65	27	45	32	59	42	.....	.....	.....	.....	43	17	48	27	.....	.....	34	3	60	34
21....	62	31	62	28	36	21	48	35	65	28	55	32	58	42	.....	.....	.....	.....	44	30	54	31	.....	.....	40	25	59	32
22....	57	31	68	32	44	17	54	38	57	35	60	36	59	43	30	15	.....	.....	48	31	52	30	.....	.....	45	29	46	40
23....	57	31	60	32	45	20	63	45	60	30	66	35	67	38	46	22	.....	.....	56	34	56	31	.....	.....	48	31	57	31
24....	57	35	53	38	57	25	54	42	60	33	68	46	53	43	49	34	.....	.....	54	38	52	31	.....	.....	53	31	51	37
25....	53	36	54	40	47	21	55	36	57	28	60	33	61	39	46	30	.....	.....	47	35	54	29	.....	.....	40	31	50	34
26....	53	35	56	26	51	20	59	40	58	32	65	38	64	36	47	20	.....	.....	53	31	55	27	.....	.....	48	32	54	30
27....	58	34	59	34	54	20	59	37	58	32	67	35	66	44	44	27	.....	.....	56	30	54	29	.....	.....	54	28	56	33
28....	58	36	59	33	59	22	59	46	54	38	64	48	61	48	46	30	.....	.....	56	37	60	33	.....	.....	51	32	56	37
29....	50	39	57	39	57	32	59	43	45	35	68	47	65	49	45	24	.....	.....	57	40	57	32	.....	.....	49	35	54	40
30....	53	34	54	36	44	30	52	41	53	36	60	40	60	46	46	30	.....	.....	55	33	56	37	.....	.....	50	28	48	34
Mns..	57.7	33.8	58.7	32.5	47.5	21.2	57.8	38.7	59.5	31.0	64.1	38.0	62.6	40.3	50.3*	27.5*	.....	.....	53.0	43.2	57.9	30.2	.....	.....	46.2	26.2	56.0	33.4

Date.	Washington.																									
	Aberdeen.		Blaine.		Colville.		Kosmos.		Lakeside.		North Head.		North Yakima.		Odessa.		Port Crescent.		Seattle.		Sixprong.		Spokane.		Tacoma.		Tatoosh Island.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	58	40	62	33	67	31	72	31	65	43	54	48	76	38	70	36	52	38	64	44	75	37	64	38	64	43	50	45
2....	51	41	56	37	72	28	61	33	68	36	50	45	74	34	72	35	48	40	54	43	72	38	71	38	55	42	48	43
3....	50	41	51	46	64	38	53	36	60	45	48	41	64	43	61	38	48	37	51	39	64	45	56	42	52	43	47	40
4....	48	33	50	33	61	37	49	32	55	39	46	41	58	38	56	37	48	33	49	37	56	41	52	40	50	36	44	37
5....	55	28	50	27	61	32	56	31	57	36	52	41	60	37	54	30	45	29	49	35	59	40	51	33	51	33	47	38
6....	58	35	60	38	63	36	71	31	58	35	48	45	67	33	58	30	54	37	61	40	69	45	60	30	61	36	51	44
7....	66	31	55	46	72	30	63	43	59	43	51	41	68	40	67	30	52	36	59	45	69	49	65	43	56	45	58	44
8....	58	33	56	30	67	31	72	31	69	41	51	43	74	42	71	37	54	31	58	43	72	42	72	36	59	40	52	42
9....	56	34	55	36	76	30	67	34	68	39	48	45	76	39	75	35	51	34	56	41	75	40	74	38	57	38	52	45
10....	50	37	53	41	74	36	53	39	60	43	46	42	76	45	68	44	51	35	47	41	63	41	57	38	49	41	50	43
11....	53	38	53	41	65	37	54	37	55	41	46	44	61	34	58	35	50	39	53	40	56	33	55	37	52	40	52	44
12....	55	29	52	31	67	30	51	39	60	38	49	43	60	44	63	41	50	36	50	43	56	41	63	40	52	42	50	44
13....	56	33	52	41	55	35	46	35	51	46	49	41	56	40	51	38	49	34	48	40	58	37	44	38	48	39	51	41
14....	59	31	56	35	57	39	62	29	58	43	50	41	65	30	59	38	51	29	57	41	63	33	56	34	58	36	53	39
15....	58	28	58	30	66	27	65	29	66	35	51	42	68	38	62	31	51	29	59	39	66	39	60	32	62	38	52	42
16....	57	37	57	33	67	31	61	29	65	38	50	47	68	38	66	31	55	41	59	43	63	41	63	38	62	42	50	45
17....	57	42	55	36	61	37	58	42	64	46	49	43	65	47	62	35	52	41	55	42	63	39	58	40	57	43	47	42
18....	54	30	54	41	56	41	51	37	60	43	47	42	62	40	59	33	50	37	51	39	54	41	56	40	52	39	50	41
19....	56	34	53	39	54	40	49	32	56	45	50	42	58	41	51	37	49	34	49	39	57	37	47	35	50	39	53	43
20....	50	35	51	42	57	38	47	38	64	41	49	44	67	41	57	33	49	40	50	42	62	41	57	40	51	42	49	44
21....	49	31	54	36	64	21	51	32	63	39	49	42	60	42	55	31	50	39	52	41	55	40	57	36	52	41	52	44
22....	54	34	59	45	62	31	64	37	67	41	52	41	65	38	62	38	51	38	59	43	65	35	54	42	59	41	56	44
23....	60	40	57	39	61	29	54	40	61	40	50	45	65	38	62	39	50	41	54	44	65	44	59	36	52	43	51	44
24....	54	39	56	41	63	37	58	38	64	37	50	45	66	42	61	41	53	42	52	42	61	41	58	41	55	38	52	43
25....	57	37	57	44	61	29	55	39	62	39	49	45	64	38	61	32	49	36	53	44	60	38	55	36	54	43	48	42
26....	58	39	58	34	61	32	63	36	68	39	54	46	68	36	61	32	52	31	57	43	67	37	57	35	60	42	54	42
27....	53	40	56	46	62	35	60	33	65	39	49	46	66	37	59	31	51	34	55	45	64	39	58	40	57	43	49	46
28....	54	41	55	46	58	50	61	47	56	42	52	47	64	47	59	46	55	41	57	47	63	46	55	44	56	46	52	46
29....	52	44	58	44	57	41	58	45	60	47	52	44	64	46	60	46	58	43	56	43	62	46	58	44	55	45	52	44
30....	56	39	57	43	58	34	58	38	63	43	51	43	62	37	57	38	51	35	57	42	57	37	55	40	56	41	53	43
Mns..	55.1	35.8	55.2	38.5	63.0	34.1	58.1	35.8	61.6	40.7	49.7	43.5	65.6	39.4	61.2	35.9	51.0	36.3	54.4	41.7	63.0	40.1	58.2	38.1	55.1	40.7	50.7	42.8

TABLE 3.—*Maximum and minimum temperatures for April, 1912. District No. 12*—Continued.

Date.	Washington.		Oregon.																			
	Walla Walla.		Ashland.		Baker.		Eugene.		Gold Beach.		Hermiston.		Marshfield.		Portland.		Prineville.		Roseburg.		The Dalles.		Vale.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	72	51	69	39	66	31	86	42	55	41	78	28	52	42	72	42	60	24	73	37	74	39	71	26
2	73	49	59	39	68	32	79	38	56	46	72	52	58	43	55	42	61	20	60	45	71	41	78	26
3	64	46	55	41	62	39	60	40	59	47	68	43	58	39	56	39	70	20	61	47	62	46	76	43
4	55	42	51	42	52	33	55	35	55	38	60	45	55	40	51	38	60	32	55	37	57	42	67	47
5	56	42	60	32	49	27	64	35	57	36	61	41	61	30	55	41	67	30	66	32	70	41	61	26
6	74	40	74	37	61	25	72	42	55	41	74	28	59	35	67	40	66	26	76	35	68	35	69	23
7	70	46	53	41	64	41	68	34	54	42	70	41	56	42	60	46	70	23	55	42	64	48	74	37
8	71	45	68	35	70	34	66	36	58	39	74	32	60	33	69	42	67	30	66	36	72	38	79	35
9	75	51	65	40	71	35	64	41	53	42	76	32	55	46	64	45	68	30	53	40	73	44	82	35
10	57	41	48	36	58	35	4	36	52	44	70	41	53	44	51	43	66	28	52	43	67	47	72	47
11	59	38	53	34	48	31	48	38	47	38	60	33	47	37	55	40	70	32	45	36	61	34	55	32
12	48	41	47	32	43	35	54	35	50	37	56	44	53	40	54	42	73	31	51	40	59	48	52	41
13	54	40	42	32	46	28	56	32	53	36	58	40	56	28	55	35	70	28	57	36	60	39	59	38
14	61	37	54	32	49	27	63	33	59	38	64	30	62	28	62	34	71	26	63	31	64	31	55	25
15	64	41	60	34	50	33	69	41	57	49	68	31	61	30	65	38	70	30	67	33	68	36	57	33
16	67	45	60	38	54	30	62	36	58	40	71	33	57	41	58	41	57	31	61	43	69	36	67	30
17	60	46	.....	.....	49	35	62	36	57	39	65	47	61	36	57	43	53	33	63	40	61	49	62	36
18	46	41	52	34	45	31	53	32	50	39	55	41	52	36	51	41	50	30	47	36	57	45	54	32
19	48	38	49	32	42	31	52	32	48	32	59	39	50	32	54	39	50	26	52	34	57	41	47	36
20	51	39	47	32	48	31	56	34	55	37	62	41	55	34	51	43	53	29	57	41	59	45	54	38
21	51	43	50	34	44	31	59	33	52	38	59	43	51	38	55	39	50	30	56	39	59	45	51	37
22	64	45	54	31	52	31	62	42	57	37	67	41	58	32	64	45	53	30	59	35	67	36	63	38
23	63	50	58	42	55	38	56	43	53	45	67	46	51	42	57	46	50	30	58	46	66	45	67	35
24	56	45	51	41	46	36	57	42	55	46	67	46	55	44	59	45	50	32	52	43	66	45	63	45
25	58	43	49	38	50	33	55	41	53	41	62	41	51	40	55	43	52	28	55	41	64	44	63	39
26	64	44	58	38	54	35	63	40	58	41	72	33	58	37	60	42	50	26	67	40	68	36	65	35
27	65	46	61	37	59	32	61	46	55	44	67	37	54	40	60	45	57	32	64	40	68	42	68	36
28	62	48	53	45	53	44	55	44	53	46	70	56	54	41	60	48	54	29	65	48	64	49	67	49
29	64	42	55	39	53	39	53	36	52	41	68	52	50	44	55	43	50	30	52	42	63	47	61	47
30	56	43	55	38	46	33	49	40	52	41	62	35	48	42	52	42	51	26	51	40	60	38	54	33
Mean	60.9	43.6	55.5[a]	36.7[a]	53.6	33.2	60.3	37.8	54.3	40.7	66.1	39.1	55.0	37.9	58.0	41.7	59.6	28.4	58.8	39.3	64.6	41.7	63.8	36.0

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record.
‡‡ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

WEATHER, FORECASTS, AND WARNINGS.

By EDWARD H. BOWIE, District Forecaster.

Alaska.—During the first decade pressure averaged below normal. During the remainder of the month pressure was below the seasonal average over the western and above over the eastern portion. Lows occurred about the 1st, 3d–4th, 8th, 13th, 15th, 19th, 28th, and 30th; and highs about the 6th–7th, 10th–11th, 17th, and 21st–26th.

Honolulu.—Pressure was above normal except on the 4th–5th, 18th, and on the last day of the month. Lows occurred on the dates above mentioned and highs on the 2d, 10th–11th, 14th, 21st, and 26th–27th.

Iceland.—During the first and second decades pressure was almost continuously below normal, while during the last decade it was decidedly above normal. Lows occurred on the 2d–3d, 4th–5th, 8th–9th, 14th, 16th, 20th, and 27th; and highs on the 1st, 7th, 11th, 15th, 17th–18th, 23d, 25th, and 29th. The storm noted at Iceland on the 8th–9th caused severe gales along the coast and in the interior of Germany on the 9th.

Azores.—Pressure was continuously above normal, except on the 19th and last of the month, with slight fluctuations. Lows occurred on the dates above mentioned and highs on the 5th, 7th–8th, 14th, 17th, 21st, 23d, and 26th.

Siberia.—During the first half of the month western Siberia experienced extremely low pressure for the season, while over the eastern half pressure averaged above normal. From the 16th to the 23d pressure was above normal over the western portion and from that time until the end of the month it was below normal. Over eastern Siberia during the last half of the month, pressure averaged slightly below normal. Over the east Asiatic coast during the last two decades of the month pressure was almost continuously low. The progression of highs and lows across Siberia was not well defined.

In the United States the month opened with temperatures above the seasonal average in the Northwest and in the middle Atlantic, south Atlantic, and Gulf States, elsewhere temperatures were below the seasonal average. High-pressure areas were central, one over Quebec, one off the south Atlantic coast, and a third over the middle Pacific coast. Low-pressure areas were central, one over eastern Manitoba and another over northeastern Texas. By the morning of the 2d pressure had fallen over the East and there was a center of low pressure over Kentucky, with an extension of low pressure and rains thence to New England. During the 2d, storm warnings were ordered for the entire Atlantic coast, and by the morning of the 3d the storm center, greatly increased in intensity, was south of Halifax, having caused gales from Jacksonville to Eastport. Precipitation occurred from the Plains States eastward to the Atlantic coast. Part of the high-pressure area that was central over the middle Pacific coast at the beginning of the month passed inland and by the morning of the 2d was over New Mexico, causing frost in that State, warning of which was issued the previous day. By the morning of the 3d the high-pressure area was over the Texas coast, light frost being reported in southeastern Texas and in eastern and central Tennessee and northern Alabama. By the morning of the 4th the high had advanced to the middle Atlantic States causing light to killing frosts quite generally over eastern Tennessee, North Carolina, and Virginia, and the following morning it had moved eastward off the middle Atlantic coast.

A storm that was central over Alberta on the 4th moved to eastern North Dakota by the following morning, and on the morning of the 6th it was over Minnesota causing rains in the upper Mississippi Valley and the Plains States. By the 7th it was over eastern Ontario, precipitation having spread eastward into the Lower Lakes, the Ohio Valley, and the Gulf States, moving thence by the morning of the 8th to New Brunswick, and causing precipitation over the Atlantic States. The storm had passed from the region of observations by the following morning. A number of severe local storms attended this disturbance over portions of New York State during the 7th.

The following weekly forecast was issued Sunday, April 7:

> The general distribution of barometric pressure over the Northern Hemisphere is such as to indicate that in the United States the coming week will give temperatures near the seasonal average with the precipitation generally light and local. A change to considerably cooler weather will overspread the eastern districts Monday, but it will be followed by rising temperature on Tuesday and for several days thereafter.
>
> Warmer weather is also probable in the Middle West and the South Monday and Tuesday. The next disturbance of importance to cross the country will appear in the far West about Wednesday, cross the Middle West about Thursday or Friday, and the Eastern States near the close of the week; it will be attended by local rains and be followed by cooler weather, which will overspread the Northwestern States Thursday or Friday.

A high pressure area that was central on the north Pacific coast on the morning of the 5th moved to southwestern Montana by the morning of the 6th. On the morning of the 7th it was over the southern Plains States; and by the following morning it was over the middle Mississippi Valley, moving thence off the Carolina coast. It caused light frost in Tennessee, Virginia, North Carolina, and Georgia, warnings of which were previously issued.

A disturbance of slight intensity passed from Alberta on the evening of the 7th to Lake Michigan by the morning of the 9th, and thence to a position off the New England coast during the following 24 hours, causing little precipitation.

An area of high pressure of slight intensity passed from the northern Plains States to the middle Atlantic coast from the 9th to 11th.

The following weekly forecast was issued Sunday, April 14:

An extensive barometric depression that now covers the Middle West will move slowly eastward and cause unsettled, showery weather the first half of the coming week in the Atlantic States and the region of the Great Lakes and rain and possibly snows Monday in the Northwestern States and the extreme upper Mississippi Valley. This disturbance, which will pass down the St. Lawrence Valley Tuesday, will be followed by cooler weather over the Middle West and the Eastern States. Unseasonably cool weather will continue the first part of the week over the northern Plains States and the Rocky Mountain and Plateau regions. The next disturbance to cross the country will appear in the far West Wednesday or Thursday and prevail over the Middle West near the close of the week; it will be attended by local rains and be preceded by a general rise in temperature and be followed by considerably colder weather, which will make its appearance in the Northwestern States Thursday or Friday.

The disturbance that appeared over the northern Plateau on the evening of the 9th moved slowly eastward during the next 24 hours and by the morning of the 12th was over southern Wyoming. During the following 24 hours the storm increased in intensity and moved to western Nebraska, and by the morning of the 13th to eastern North Dakota, during the afternoon of which day a number of tornadoes occurred in Missouri. By the morning of the 14th it was over Wisconsin with greatly increased intensity, and there was a low center of slight intensity over southwestern Texas. By the following morning the northern storm had passed northeastward into Canada. This storm caused general precipitation from the Pacific to the Atlantic coast. The storm that was central over southwestern Texas on the morning of the 15th moved to the southern Texas coast by the morning of the 16th. A number of severe local storms were reported during the night of the 16th in Louisiana, in several cases accompanied by destructive hail. By the morning of the 17th the storm was over western Tennessee with a secondary over northeastern Georgia. By the morning of the 18th the main center had passed to southern Lake Huron and the secondary was over western Virginia. On the morning of the 19th there was a center over New Brunswick, which during the next 24 hours passed to Newfoundland, with pressure reading at St. Johns 29 inches.

A high-pressure area that was central over North Dakota on the evening of the 15th remained practically stationary over that region until the evening of the 18th, at which time there was an offshoot over western Tennessee. Frost warnings were ordered for South Dakota, Nebraska, Kansas, Oklahoma, northern Texas, New Mexico and Colorado on the 16th, all of which were verified. On the morning of the 19th the high area was over the middle Mississippi Valley and upper Lake region. Frosts occurred in Iowa, southern Wisconsin, Illinois, Indiana, western Ohio, Kentucky, and central Tennessee, warnings of which had been previously issued. By the morning of the 20th the high was over the lower Lakes and frosts were reported in Maryland, eastern Pennsylvania, New Jersey, and parts of New York, notice of which was previously disseminated. It had passed off the coast by the following morning.

A slight disturbance that was central on the Alabama coast on the morning of the 20th moved to the coast of South Carolina by the evening of that date. This disturbance was of particularly marked severity in the vicinity of Charleston, S. C., the wind attaining a velocity of 69 miles an hour from the southeast at 5.21 p. m. of the 20th. By the following morning the center was south of Cape Hatteras, whence it passed northeastward into the ocean. Numerous severe thunderstorms and a number of tornadoes attended this storm during the afternoon and evening of the 20th over portions of Georgia, Alabama, South Carolina, and northern Florida. Excessive precipitation also occurred over the States mentioned.

The following weekly forecast was issued Sunday, April 21:

The indications are that during the coming week temperatures will average above the normal in the Southern and Eastern States and near or below the normal, with frosts, over the Middle West, the Rocky Mountain and Plateau regions. The weather during the week will be unsettled with well-distributed precipitation over the greater part of the country. A disturbance that is now over the Plains States will move eastward and pass down the St. Lawrence Valley Tuesday; it will cause general rains the first part of the week in the region east of the Mississippi River. Another disturbance will develop over the western Plateau Tuesday or Wednesday, cross the Middle West about Thursday and the Eastern States Friday; this disturbance will be attended by general rains and be followed by considerably cooler weather.

The next storm to cross the country apparently developed over the Plateau region during the 18th and by the morning of the 19th was central over southern Utah, precipitation having occurred quite generally throughout the Plateau region. By the morning of the 20th the storm center was over southeastern Colorado. It passed thence northeastward and on the morning of the 21st was over eastern Nebraska, having caused precipitation over the Plains States and the Upper Mississippi Valley. On the morning of the 22d the storm was over Lake Huron. Storm warnings were ordered for the Atlantic coast from Delaware Breakwater to Eastport on the evening of the 22d, and high winds occurred over the territory indicated within the next 24 hours. The storm on the morning of the 23d was over northern Maine with decidedly increased intensity. Tornadoes occurred in connection with this storm over portions of Kansas, Oklahoma, Illinois, Indiana, Missouri, and Alabama.

A high-pressure area, which developed in the rear of the low just referred to, was central on the morning of the 22d over the Texas Panhandle, causing heavy to killing frosts in Colorado, New Mexico, the Texas Panhandle, Nebraska, and Kansas, warnings of which had been previously disseminated. By the morning of the 23d the high was over western Tennessee and frosts occurred quite generally over the Ohio Valley and the Lake region. By the morning of the 24th the high was over the South Atlantic States and the following morning it had moved to West Virginia with increased intensity, passing off the Middle Atlantic coast.

From the evening of the 23d to the evening of the 24th conditions were unsettled over the middle Plateau region, and on the morning of the 25th a storm was central over western Nebraska. Storm warnings were ordered for the upper lakes during the afternoon of the 25th. On the morning of the 26th the storm had advanced to Minnesota with greatly increased intensity and storm warnings were ordered for Lake Erie and later in the day extended to Lake Ontario. Storm winds occurred over all lakes. On the morning of the 27th the storm center was over western Quebec and by the following morning was over the Canadian Maritime Provinces.

Following the passage of this low, a high-pressure area appeared over Saskatchewan on the morning of the 26th, and by the morning following had advanced to Manitoba. On the morning of the 28th it was over

Lake Huron with increased intensity, and by the morning of the 29th was over Quebec with greatly decreased intensity.

The following weekly forecast was issued Sunday, April 28:

The general distribution of barometric pressure over the North American Continent and the adjacent oceans is such as to indicate that there will be frequent and well-distributed showers and normal temperature the coming week throughout the country. Three barometric depressions will cross the country during the week and they will be attended by local rains and thunderstorms. The first of these storms is now over the Southwest, whence it will move northeastward and pass down the St. Lawrence Valley on Tuesday; the next disturbance to cross the country is off the North Pacific coast, whence it will move eastward and cross the Rocky Mountains Tuesday, the Middle West Wednesday, and the Eastern States about Thursday; the third storm will appear in the far West Thursday or Friday and prevail over the Middle West near the close of the week.

The next disturbance to cross the country appeared over the southern Plateau on the morning of the 26th, and by the following morning was over northwestern New Mexico. During the night of the 27th tornadoes occurred over portions of Oklahoma and southern Kansas. On the morning of the 28th the storm was over western Oklahoma with increased force, and by the morning of the 29th it was over southern Illinois. During the next 24 hours it advanced to North Carolina with decreased intensity, and at the end of the month it was off the middle Atlantic coast with still further loss of energy.

A high-pressure area of slight intensity followed the passage of the low before mentioned, and was central over the Plains States on the morning of the 29th. By the morning of the 30th the center of the high was over Lake Superior and at the end of the month it was over Lake Huron.

A low that appeared on the extreme north Pacific coast on the morning of the 29th moved to Alberta by the morning of the 30th.

TEMPORARY OR REPORTED CHANGES IN ALASKAN CLIMATE.

With reference to a discussion regarding the possible permanent changing of the climate of Alaska, due to the shifting of the Japanese current, which has attracted some attention, the following is submitted:

It is a fact that the months of January and February, 1912, gave temperatures above the seasonal average over the Alaskan area. It is also true that these months were warmer than the average on the Pacific slope of North America as far south as southern California and Arizona, while over the greater part of the United States and southern Canada east of the Rocky Mountains these two months were unusually cold. December was cold on the Pacific slope and in Alaska, and much warmer than the average east of the Rocky Mountains.

The part that the Japanese current played in the causation of the temperature conditions over Alaska and the Pacific States is a minor one, and wholly secondary to the distribution of atmospheric pressure and the resultant winds over the North Pacific Ocean and the interior of western Canada.

At Sitka, Alaska, in a period of 28 years, there were 18 Decembers warmer than that of 1911; and 4 years when January was warmer than the same month in 1912; while the temperature for February, 1912, 41°, is the highest of record during the period. The next warmest February was that of 1902, when the average temperature was 39.6°.

At Nome, Alaska, in a period of 6 years there were 4 Decembers warmer than this month in 1911. January, 1912, was the warmest January in this period, while February, 1908, was the warmest February.

It is a fact that the atmospheric pressure for the past winter averaged below normal over the Alaskan area, it being decidedly so in the month of February, when the excess of temperature in this region was marked. It is also true that in January and February the pressure was above the normal off the California and Oregon coasts and over western Canada. This leads to the assumption that the circulation of the winds around the high-pressure area in middle latitudes of the Pacific Ocean and their northward deflection into the low-pressure area over Alaska was the real cause of the warm weather in the latter region in January and February, 1912. The extension of the Japanese current to the northward of its normal course, so far as this happened at all, probably only on the surface, was doubtless incidental to this pressure distribution and the resulting winds. As soon as the usual pressure distribution was reestablished, normal temperature conditions again set in over Alaska.

Average temperatures and departures from the normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since Jan. 1.	Average departures since Jan. 1.
New England	12	43.9	+0.3	−10.2	−2.6
Middle Atlantic	15	52.2	+1.7	−10.5	−2.6
South Atlantic	10	64.4	+3.1	− 6.2	−1.6
Florida Peninsula[1]	9	74.2	+3.7	− 0.2	0.0
East Gulf	11	65.9	+1.3	− 9.4	−2.9
West Gulf	11	56.6	−0.2	−13.6	−3.4
Ohio Valley and Tennessee	14	56.9	+2.2	−16.8	−4.2
Lower Lakes	11	45.2	+0.1	−20.9	−5.2
Upper Lakes	13	41.9	+1.1	−23.3	−5.8
North Dakota[1]	9	44.5	+3.7	− 7.0	−1.8
Upper Mississippi Valley	14	51.9	+1.4	−23.0	−5.8
Missouri Valley	12	52.6	−2.1	−14.6	−3.6
Northern slope	10	44.1	+1.3	− 6.7	−1.7
Middle slope	6	52.6	−1.1	−16.2	−4.0
Southern slope[1]	8	60.6	−1.0	−12.7	−3.2
Southern Plateau[1]	9	55.7	−3.3	− 4.4	−1.1
Middle Plateau[1]	10	43.5	−3.3	+ 1.3	+0.3
Northern Plateau[1]	11	46.8	−0.3	+ 0.4	+0.1
North Pacific	7	47.4	−1.0	+ 5.6	+1.4
Middle Pacific	7	50.9	−2.7	− 0.1	0.0
South Pacific	4	55.2	−2.8	+ 2.6	+0.6

[1]Regular Weather Bureau and selected cooperative stations.

Average precipitation and departures from the normal.

Districts.	Number of stations.	Average.		Departures.	
		Current month.	Percentage of normal.	Current month.	Accumulated since Jan. 1.
New England	12	3.27	109	+0.2	+ 0.7
Middle Atlantic	15	2.87	93	−0.2	+ 0.5
South Atlantic	11	3.91	115	+0.5	+ 1.2
Florida Peninsula[1]	9	3.27	208	+1.7	+ 5.0
East Gulf	11	10.40	254	+6.3	+10.1
West Gulf	12	4.61	131	+1.1	+ 0.7
Ohio Valley and Tennessee	14	6.44	177	+2.8	+ 2.1
Lower Lakes	11	3.09	121	+0.7	+ 0.6
Upper Lakes	13	2.50	109	+0.2	− 2.3
North Dakota[1]	9	2.20	137	+0.6	− 0.7
Upper Mississippi Valley	15	3.77	127	+0.8	− 0.7
Missouri Valley	11	2.97	103	+0.1	+ 0.7
Northern slope	9	1.74	113	+0.2	+ 0.2
Middle slope	6	1.98	91	−0.2	+ 0.4
Southern slope[1]	8	2.41	100	0.0	0.0
Southern Plateau[1]	9	0.52	124	+0.1	− 0.2
Middle Plateau[1]	11	1.00	91	−0.1	0.0
Northern Plateau[1]	11	1.60	133	+0.4	0.0
North Pacific	7	2.67	82	−0.6	− 3.5
Middle Pacific	7	2.42	120	+0.4	− 4.2
South Pacific	4	1.98	202	+1.0	− 0.4

[1] Regular Weather Bureau and selected cooperative stations.

Average relative humidity and departure from the normal.

Districts.	Average.	Departure from normal.	Districts.	Average.	Departure from normal.
New England	75	+2	Upper Mississippi Valley	69	+ 1
Middle Atlantic	72	+5	Missouri Valley	64	− 1
South Atlantic	75	+3	Northern slope	63	+ 5
Florida Peninsula	79	+5	Middle slope	59	+ 2
East Gulf	77	+7	Southern slope	52	− 3
West Gulf	74	+2	Southern Plateau	43	+13
Ohio Valley and Tennessee	69	+4	Middle Plateau	54	+ 9
Lower Lakes	74	+4	Northern Plateau	60	+ 3
Upper Lakes	73	0	North Pacific	78	+ 7
North Dakota	67	−1	Middle Pacific	73	+ 1
			South Pacific	73	+ 5

Average cloudiness and departure from the normal.

Districts.	Average.	Departure from normal.	Districts.	Average.	Departure from normal.
New England	6.3	+0.8	Upper Mississippi Valley	5.8	+0.6
Middle Atlantic	6.0	+0.8	Missouri Valley	5.1	−0.5
South Atlantic	5.3	+0.7	Northern slope	5.3	+0.2
Florida Peninsula	4.9	+1.1	Middle slope	4.9	+0.3
East Gulf	6.3	+1.4	Southern slope	4.2	−0.5
West Gulf	5.9	+0.8	Southern Plateau	3.1	+0.3
Ohio Valley and Tennessee	5.8	+0.5	Middle Plateau	5.9	+1.4
Lower Lakes	5.7	0.0	Northern Plateau	6.8	+1.6
Upper Lakes	5.5	0.0	North Pacific	7.2	+1.0
North Dakota	4.6	−0.7	Middle Pacific	5.4	+1.0
			South Pacific	4.8	+0.8

Maximum wind velocities, April, 1912.

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
Block Island, R. I.	23	54	w.	Nantucket, Mass.	7	50	sw.
Charleston, S. C.	20	67	se.	Nashville, Tenn.	26	50	nw.
Cheyenne, Wyo.	13	62	nw.	New York, N. Y.	3	56	nw.
Chicago, Ill.	26	51	s.	Do.	7	68	sw.
Cleveland, Ohio.	26	58	s.	Do.	8	60	nw.
Columbus, Ohio.	7	54	nw.	Do.	9	51	sw.
Dayton, Ohio.	22	57	sw.	Do.	19	50	nw.
Do.	26	52	se.	Do.	23	84	nw.
Detroit, Mich.	9	50	w.	Do.	24	54	w.
Duluth, Minn.	26	70	nw.	Do.	27	58	n.
El Paso, Tex.	12	58	w.	Do.	28	52	n.
Fort Worth, Tex.	27	50	s.	North Head, Wash.	27	50	se.
Green Bay, Wis.	6	50	s.	Do.	28	52	se.
Do.	26	55	sw.	Do.	29	56	se.
Hatteras, N. C.	22	60	s.	Oklahoma, Okla.	20	50	se.
Kansas City, Mo.	14	51	sw.	Pensacola, Fla.	17	56	s.
Lander, Wyo.	5	54	sw.	Pittsburgh, Pa.	7	50	nw.
Do.	29	52	sw.	Point Reyes Light, Cal.	4	51	nw.
Lexington, Ky.	2	60	w.	Do.	11	51	nw.
Minneapolis, Minn.	21	52	n.	Do.	16	54	nw.
Modena, Utah	18	52	sw.	Do.	17	74	nw.
Mount Weather, Va.	2	77	nw.	Do.	18	77	nw.
Do.	3	64	nw.	Do.	19	60	nw.
Do.	7	74	nw.	Do.	20	54	nw.
Do.	8	62	nw.	Do.	24	52	nw.
Do.	18	53	nw.	Do.	26	54	nw.
Do.	19	54	nw.	Do.	28	60	s.
Do.	22	58	w.	Providence, R. I.	23	50	w.
Do.	23	72	nw.	Pueblo, Colo.	13	54	nw.
Mount Tamalpais, Cal.	11	66	nw.	St. Louis, Mo.	25	50	se.
Do.	12	54	nw.	Sault Ste. Marie, Mich.	27	50	w.
Do.	16	53	nw.	Savannah, Ga.	22	53	w.
Do.	17	60	nw.	Southeast Farallon, Cal.	18	52	nw.
Do.	18	68	nw.	Do.	19	53	nw.
Do.	19	66	nw.	Syracuse, N. Y.	26	50	s.
Do.	20	58	nw.	Toledo, Ohio.	9	53	sw
Do.	21	66	nw.	Do.	15	54	sw.
Do.	24	61	nw.	Do.	26	57	sw.
Do.	26	54	nw.				
Do.	29	53	nw.				

NOTES ON THE APPLICATION OF UPPER-AIR OBSERVATIONS TO WEATHER FORECASTING.

By Prof. ALFRED J. HENRY.

The wind during the month of April, 1912, at Mount Weather was favorable for kite flying. On 24 days heights of a mile or more above sea level were attained, and on 12 of the days the altitude reached exceeded 2 miles above sea level. On the 25th a height of 3.4 miles above sea level was reached.

A very considerable mass of detail as regards the temperature, relative humidity, wind direction, and velocity have been thus obtained, much of which stands in more or less definite relation to the weather types on the individual dates; there were some dates, however, when the relation between the observed conditions in the free air above Mount Weather and on the surface, as shown by the daily weather map, was not clearly apparent, as, for example, the three-day period of high northwest winds that began on the 3d and continued until the 5th. At the beginning of the period, the wind, both as to direction and speed, was clearly justified by the surface isobars, but on the middle day of the period there was observed at an altitude of about 2.5 miles (4 km.) a northwest wind of 73 miles per hour (33 meters per second), blowing directly across the central region of an extensive area of high barometric pressure, almost at right angles to the surface isobars, when, according to the belief generally held, the air in that portion of an anticyclone should be engaged in a descending motion.

Another three-day period of high winds set in on the 8th, when the maximum wind velocity of the month, 84 miles per hour (35.8 meters per second), was registered at an altitude of 8,947 feet (2,727 meters).

On the second day, at an altitude of 13,957 feet (4,255 meters), a velocity of 74 miles per hour (33 meters per second) and on the third day, at an altitude of 13,517 feet (4,120 meters), a velocity of 65 miles per hour (29 meters per second) from the west-northwest was registered, respectively. Except on the third day the wind direction aloft agreed fairly well with the surface isobars, but on that day Mount Weather, as before, was in the central portion of a region of high pressure, where strong horizontal winds are not expected. On the 4th day, at an altitude of 16,404 feet (5,000 meters), a west-northwest wind of 62 miles per hour (27.7 meters per second) was observed, but at a lower altitude the wind was west-southwest, and at the surface it was south-southeast. This fact seems to indicate that the change in the direction of the wind from a northerly to a southerly quarter begins at the surface and gradually works aloft. A change from northerly or westerly to southerly winds is usually a good prognostic of rain and falling weather. In this case rain occurred two days after the change, but the coming of the rain was also indicated on the daily weather map.

The relation between the temperature aloft and at the surface during April did not seem to be very close. On seven days during the month relatively high temperatures, which might be considered roughly as the crests of warm waves, appeared at levels closely approximating 5,900 feet above sea level (1,800 meters). The average temperature at that level for the seven days was 9.8° C.; the corresponding average for the surface was 12.7° C., a difference of 2.9° C. in 1,274 meters above Mount Weather, or a decrease of 0.23° C. per 100 meters of altitude. In two of the cases there was an inversion of temperature between the surface and the level of 1,800 meters, but in three other cases the air column temperatures were very nearly isothermal, the average decrease being less than a tenth of a degree C. for 100 meters of altitude. The warming that accompanies cyclones which pass near Mount Weather seems to be mostly confined to the layers between 1 and 2 kilometers above sea level, although at times the atmosphere possesses a relatively high temperature up to the 4-kilometer level (13,123 feet). On April 29, 1912, the kites were able to pass through the fog which enveloped the mountain, the latter on that date being in the front of a well-marked barometric depression. The depth of the fog was rather definitely fixed by the high temperature and low humidity encountered as the kite emerged from the fog at an altitude of 1,264 meters (4,174 feet) above the mountain.

It seems probable that the heating effect frequently observed between the 1 and 2 kilometer levels on the front of cyclones may be due to reflection and absorption of solar radiation at the upper surface of the clouds which in these latitudes almost invariably accompany cyclones. On the other hand the general warming of the atmosphere up to the 4 kilometer level is probably the result of transportation of warmer air from lower latitudes. Of course, both causes may be operative in one and the same cyclone. The lowering of temperature, due to a screen of cloud or fog has been observed on Mount Weather when the latter is in full sunshine and the valley stations about 300 meters below are under cover of a fog blanket. This condition obtained on February 19, 1912, and persisted for 12 hours. The mean lowering of temperature in the eastern valley was 3.06° C. (5.5° F.), western valley 3.22° C. (5.8° F., below that of Mount Weather for the corresponding time. These amounts evidently do not accurately represent the difference in temperature between the upper and lower surfaces, respectively, of a cloud layer.

The kite flights on the 12th and 15th are particularly interesting, in view of the fact that a thunderstorm apparently developed on each of the dates while the kite meteorograph was in the air. On the 12th there was very little horizontal wind across the mountain and no evidence of ascending currents, either in the behavior of the kites, or the form of clouds present; the latter were of the alto-cumulus type, which gradually became dense and merged into a continuous cloud sheet. A cumulo-nimbus cloud was not seen until the thunderstorm had been in progress for at least half an hour. The discharge of static electricity which came down the kite line was frequent and heavy. The surface wind was only a few hundred meters deep, and it was only by reeling in rapidly that the kites were elevated into a vigorous south-southwest wind, which at the top of the flight had become a west wind. Evidently this strong horizontal wind was

no hindrance to the formation of a thunderstorm. Although the head kite reached an altitude of 4,300 meters above sea level, it did not reach the cloud level prevailing at that time. The clouds, however, continued to form at levels which rapidly approached the earth's surface, as is usually the case when rain begins to fall from a high sheet cloud.

On the 15th there was an inversion of temperature between about 850 and 1,100 meters above sea level, which had practically disappeared by the time of descent. In both flights the air was cooler in the descent than in the ascent in the upper one and a half kilometers only, and the decrease in temperature with altitude in both flights at times exceeded the adiabatic rate for dry air. It was also observed that the rate of decrease during the time that elapsed between the ascent and the descent of the kites remained constant at only a few levels, increasing at some and decreasing at others, and that the altitude of the unstable part of the column was generally higher on the descent than in the ascent.

On the whole the predictive value of the upper air observations during April was not great. The idea suggested in these "notes" that barometric depressions follow the direction of the upper currents signally failed of confirmation on April 29, when a depression central over the lower Ohio Valley moved almost due eastward and diminished greatly in intensity, notwithstanding the prevalence of strong southwest winds above Mount Weather.

RIVERS AND FLOODS, MARCH, 1912.

By H. C. FRANKENFIELD, Professor in Charge, River and Flood Division.

The great flood in the lower Mississippi River was still in progress at the end of the month and a report thereon will be issued in the form of a special bulletin in the near future. As anticipated, this flood proved to be the greatest in the history of the lower Mississippi Valley, and it will be some time in June before the last of the flood waters pass into the Gulf.

During the month floods occurred in the rivers of the Atlantic and East Gulf States, the tributaries of the Ohio River in the States of Tennessee, Kentucky, and Indiana, the Grand and Saginaw Rivers of Michigan, the Osage, lower Arkansas, and upper Red Rivers, and in the Missouri River. These floods were mainly moderate in character, except those in western Georgia, Alabama, and Mississippi, which were more or less severe. Descriptions of some of these floods will be found in the appropriate section reports in another portion of this Review. The floods in New England and New York were ice and snow floods with warm although only moderate rains, and the losses amounted to about $35,000, nearly all of which occurred along the Winooski River of Vermont. The upper Missouri River floods were also caused by the breaking up of the ice.

Hydrographs for typical points on several principal rivers are shown on Chart I. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.

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SPECIAL PAPERS ON GENERAL METEOROLOGY.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Librarian.

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies. Anonymous publications are indicated by a ———.

Abbot, Charles [Greeley].
The sun. New York. 1911. xxiv, 447 p. ill. 8°.

Askinazi, V. O.
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O parallel'nykh nablīudenīiakh. [On parallel observations.] S.-Peterburg. 1912. cover-title. 18 p. 4°.

Batavia. Koninklijk magnetisch en meteorologisch Observatorium.
Verhandelingen. No. 1. Die Wind-Verhältnisse in den oberen Luftschichten, nach Ballonvisierungen in Batavia; von W. van Bemmelen. Batavia. 1911. 77 p. plate. 4°.
Verhandelingen, No. 2, I. Drachen- und Fesselballon-Beobachtungen. II. Wissenschaftliche Ergebnisse der Aufstiege mit dem Freiballone "Batavia"; von C. Braak. Batavia. 1912. 46 p. plate. 4°.

Brocke, Albert.
Blitz, Gewitter und Blitzableiter, volksfümlich erläutert. [Bernburg.] [1911?] cover-title. 8 p. 8°.
Der Windmühlen-Blitzableiter. (*Reprint:* Deutscher Müller, Bernburg, **31.** Jahrg., 11. Aug. 1911. p. 293–4.)
Blitzableiter für Holländer-Mühlen. (*Reprint:* Deutscher Müller, Bernburg, **32.** Jahrg., No. 9, 1. März 1912.)

Denmark. Danske meteorologiske Institut.
Annuaire magnétique, 1907–08. Copenhague. 1911. 25 p. 5 pl. f°.
Populær Vejledning til Benyttelse aj Vejrkort. Kjøbenhavn. 1911. viii, 78 p. 8°.

Ghent. Université. Station de géographie mathématique.
Annuaire météorologique, 1911–12, Année 5. Roulers. 1912. 87 p. 12°.

Gorczyński, Władysław.
Materyały do poznania opadów w Królestwie Polskiem (okres 1901–1910) . . . Précipitations observées en royaume de Pologne pendant la période 1901–1910. Avec un supplément contenant les précipitations à Varsovie (1803–1910) et à Jędrzejow (1886–1905). [Polish text. Polish and French title-page.] Warszawa. 1912. xxv, 157 p. 8°. (Publication, Soc. sci. Varsovie, III.–Cl. sci. math. et nat. Comm. météorol.)
O opadach w Warszawie. Sur les précipitations à Varsovie. [Polish text. Résumé in French.] Warszawa. 1911. 8°. (*Reprint:* Comptes rendus, Soc. sci., Varsovie, 1911, fasc. 8, p. 349–386.)
O zmienności opadu według obserwacyj Warszawskich od 1803 r. Sur la variabilité des précipitations d'après les observations faites à Varsovie depuis 1803. [Polish text. Résumé in French.] Warszawa. 1911. 8°. (*Reprint:* Comptes rendus, Soc. sci., Varsovie, 1911, fasc. 9, p. 453–485.)

[Hunter, Walter D., & Pierce, W. Dwight.]
Mexican cotton-boll weevil. Washington. 1912. 188 p. 22 pl. 8°. (U. S. Bur. entomology, bull. 114.) [Climatic control of the boll weevil is discussed on pp. 120–132.]

International union for cooperation in solar research.
Transactions, v. **3.** [Mt. Wilson meeting, 1910.] Manchester. 1911. viii, 231 p. 8°.

Italy. Ufficio centrale meteorologico e geodinamico.
Annali, ser. 2a. Vol. **19,** pt. 2, 1897. Roma. 1911. iv, 275 p. f°.
Annali, ser. 2a. Vol. **20,** pt. 2, 1898. Roma. 1911. viii, 265 p. f°.
Elenco delle pubblicazioni . . . 1860–1910. Roma. 1911. 24 p. 4°.

Koch, I. P., & Wegener, A[lfred].
Die glaciologischen Beobachtungen der Danmark-Expedition. København. 1911. 77 p. ill. 4°. (*Reprint:* Meddelelser om Grønland **46.**) [Includes measurements of air temperatures within the cave of the glacier Gnipa north of Danmarks-Havn, Greenland].

Kraus, Gregor.
Boden und Klima auf kleinstem Raum. Versuch einer exakten Behandlung des Standorts auf dem Wellenkalk. Jena. 1911. vi, 184 p. 8 pl. 8°.

McAdie, Alexander [George.]
The clouds and fogs of San Francisco. San Francisco. 1911. 106 p. plates. 8°.

Maryland. Geological survey.
Prince George's county. Baltimore. 1911. 251 p. Atlas. 4°. [The climate of Prince George's county, Md., by W. H. Alexander, p. 185–206.]

Negro, Carlo.
La meteorologia nel folk-lore. Roma. 1911. 49 p. 4°. (*Reprint:* Mem. Pontific. accad. Rom. dei nuovi Lincei, v. **29.**)
Osservazioni sulla rugiada, nota preliminare. n. t. p. 7 p. 4°. (*Reprint:* Atti, Pontific. accad. Rom. dei nuovi Lincei, anno 65, sess. 2, 21 Gennaio, 1912.)
Uno studioso di proverbi meteorologici sul principio del 1800 [Vassali-Eandi]. n. t. p. 10 p. 4°. (*Reprint:* Atti, Pontific. accad. Rom. dei nuovi Lincei, anno 65, sess. 1, 17 Dic. 1911.)

New York meteorological observatory, Central Park.
Annual report, 1911. New York. 1911. 149 p. 2 appendices. 4°. [Beginning July 1, 1911, this observatory became a branch of the Local Office, U. S. Weather Bureau.]

Prussia. Königliches preussisches meteorologisches Institut.
Bericht über die Tätigkeit, 1911. Berlin. 1912. 190 p. 4°. (Veröffentlichung, Nr. **244.**)

San Fernando. Instituto y observatorio de marina.
Anales. Sección 2. Observaciones meteorológicas, magnéticas y sísmicas, 1910. San Fernando. 1911. viii, 164 p. f°.

U. S. Weather bureau.
Monthly weather review, 1910, v. **38.** Washington. 1911. vi, 1927 p. plates. f°.

Venice. Ufficio idrografico.
Carte annuali delle pioggie nella regione Veneta per il 1909 e 1910. Venezia. 1911. 29 p. 2 maps. 4°. [Rainfall maps for 1909 and 1910 for the lower valley of the Po.]

Voller, A.
Das Grundwasser in Hamburg . . . Beobachtungen aus dem Jahre 1910. Hamburg. 1911. 7 p. 3 pl. f°. (Beiheft zum Jahrbuch der Hamburgischen wissensch. Anstalten, Bd. **28,** 1910.)

Wagner, Gotthold.
Die Änderung des Luftdruckes im anomalistischen Monat. Leipzig. 1912. 8°. (*Reprint:* Beiträge zur Geophysik, **11.** Bd., p. 276–313.) [An analysis of the barometric records at Batavia seems to reveal a lunar influence.]

Zágreb (Agram). Meteorologisches Observatorium.
Jahrbuch, 1904, Teile 1, 2. Zágreb. 1912. 101 p. f°.
Jahrbuch, 1909, Teil 3, Niederschläge in Kroatien und Slavonien im Jahre 1909. Zágreb. 1911. 50 p. f°.
Jahrbuch, 1910, Teil 3, Niederschläge in Kroatien und Slavonien im Jahre 1910. Zágreb. 1912. 48 p. f°.

RECENT PAPERS BEARING ON METEOROLOGY.

C. FITZHUGH TALMAN, Librarian.

The subjoined titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and other cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau. Unsigned articles are indicated by a ———.

American journal of science. New Haven. 4 ser. v. 33. May, 1912.

Burbank, J. E. One phase of microseismic motion. p. 470–473. [Discusses relations of microseisms to movements of "highs" and "lows."]

Burbank, J. E. Microseisms caused by frost action. p. 474–475.

Astrophysical journal. Chicago. v. 35. May, 1912.

Humphreys, W[illiam] J[ackson]. On "earthlight," or the brightness, exclusive of starlight, of the midnight sky. p. 273–278.

Country gentleman. Philadelphia. v. 77. 1912.

——— Wells as barometers. p. 3. (May 4.)

Frazer, Calvin. Every farmer his own weather bureau. How a few simple instruments will aid weather studies. p. 7. (May 18.)

——— The advance of agriculture. What science is doing for farmers. p. 11. (May 18.)

Frazer, Calvin. The thirst of the air. p. 19. (May 18.) [Describes investigations and apparatus of B. E. Livingston.]

Geographical journal. London. v. 39. April, 1912.

Unstead, J[ohn] F. The climatic limits of wheat cultivation, with special reference to North America. p. 347–366.

International Institute of agriculture. Bureau of agricultural intelligence and of plant diseases. Bulletin. Rome. 3d year. 1912.

Klein, P. A. A new series of agricultural meteorology in France. p. 607–610. (March.) [Abstract.]

Mercanton, P. L., & van Ufford, Quarles. Electric niagaras. (A propos des niagaras électriques.) p. 867–888.

London, Edinburgh, and Dublin philosophical magazine. London. v. 23. April, 1912.

Darwin, C. G. The effects of the diurnal rotation on the upper atmosphere. p. 664–668.

Nature. London. v. 89. 1912.

Gregory, R. A. Cycles of the sun and weather. p. 147–149. (April 11.)

Palmer, Andrew H. Glazed frost. p. 192. (April 25.)

Nautical magazine. Glasgow. v. 87. May, 1912.

The detection of icebergs at sea. p. 521–524.

Physical society. Proceedings. London. v. 24. April 15, 1912.

Schuster, Arthur. A critical examination of the possible causes of terrestrial magnetism. p. 121–137.

Page, T. W. Krypton and the auroral spectrum. p. 138–140.

Science. New York. v. 35. May 24, 1912.

Ward, Robert DeC. Abbott Lawrence Rotch. p. 808–811.

Seismological society of America. Bulletin. Stanford university. v. 2. March, 1912.

Drake, Noah Fields. Destructive earthquakes in China. p. 40–91. [Discusses relations of meteorology of China to earthquakes.]

Terrestrial magnetism and atmospheric electricity. Baltimore. v. 17. March, 1912.

Gockel, A[lbert]. Ueber den elektrischen Strom Erde-Luft und seinen Zusammenhang mit den Erdströmen und den Schwankungen des erdmagnetischen Feldes. p. 1–20.

Nippoldt, A[lfred]. Die Verteilung der Leitfaehigkeit der Atmosphäre ueber dem grossen Ozean, nach den Beobachtungen der "Galilee." p. 33–41.

U. S. Department of Agriculture. Yearbook. Washington. 1911.

Cox, Henry J. The Weather Bureau and the cranberry industry. p. 211–222.

Day, P. C. The winds of the United States and their economic uses. p. 337–350.

Thiessen, Alfred H. The value of snow surveys as related to irrigation. p. 391–396.

Western society of engineers. Journal. Chicago. v. 17. April, 1912.

Boardman, H. P. Wind pressure against inclined roofs. p. 331–359.

Académie des sciences. Comptes rendus. Paris. Tome 154. 1912.

Perrotin, Henri. Essai de représentation de la température en fonction de la nébulosité. p. 1014–1016. (15 avril.)

Violle, J. Mesures actinométriques pendant l'éclipse du 17 avril. p. 1017–1018. (22 avril.)

Angot, Alfred. Observations faites pendant l'éclipse du 17 avril 1912. p. 1118–1120. (22 avril.)

La Baume-Pluvinel, A. de. Sur l'observation de l'éclipse de soleil du 17 avril 1912. p. 1139–1140. (29 avril.)

Jouaust, R., & La Gorce, P. de. Mesures d'éclairement faites pendant l'éclipse du 17 avril 1912. p. 1141–1142. (29 avril.)

Nature. Paris. 40. année. 6 avril 1912.

Loisel, J. Comment on mesure la chaleur que nous recevons du soleil. p. 307–309.

Société météorologique de France. Annuaire. Paris. 59. année. Novembre–décembre 1911.

Blin, E. Remarques météorologiques anciennes faites dans les communes qui composent le département de l'Yonne. p. 319–337.

Durand-Grêville, E. La loi des crochets de grain. p. 309–318.

Annalen der Hydrographie und maritimen Meteorologie. Berlin. 40. Jahrgang. 1912.

Perlewitz, P[aul]. Bestimmung der Windrichtung und Windgeschwindigkeit in der Höhe aus den Beobachtungen von Pilotballonen. p. 177–180. (Heft 4.)

Annalen der Hydrographie und maritimen Meteorologie. Berlin. 40. Jahrgang. 1912—Continued.

Perlewitz, P[aul]. Die Windverhältnisse in den oberen Luftschichten nach Ballonvisierungen zu Batavia nach Dr. van Bemmelen. p. 181–187. (Heft 4.)

Exner, Felix M. Zur Kenntnis der untersten Winde über Land und Wasser und durch die erzeugten Meeresströmungen. p. 226–239. (Heft 5.)

Jentsch, —. Orkan im Indischen Ozean. p. 239–241. (Heft 5.)

Jentsch, —. Taifun im südchinesischen Meer vom 26. September bis 5. Oktober 1911. Nach einem Bericht des Dampfers "Sachsen," Kapt. A. Wagner. p. 241–245. (Heft 5.)

Gesellschaft für Erdkunde. Zeitschrift. Berlin. Nr. 3. 1912.

Baschin, Otto. Die Erreichung des Südpols durch Amundsen. p. 161–165. [Includes temperature data; lowest —159° C.]

Jahrbuch der Radioaktivität und Elektronik. Leipzig. 9. Band, Heft 1. 1912.

Becker, A[nton]. Über die Elektrizitätsentwicklung durch Änderung flüssiger Oberflächen in Gasen. p. 52–111.

Himmel und Erde. Berlin. Jahrgang 24. April, 1912.

Wegener, Alfred. Die Erforschung der obersten Schichten der Erdatmosphäre. p. 289–310.

Königlich preussisches meteorologisches Institut. Veröffentlichungen. Berlin. Nr. 244. 1911.

Hellmann, G[ustav]. Über die Aufstellung der Thermometer zur Bestimmung der Lufttemperatur. p. 59–83.

Wagner, Karl Willy. Über systematische Fehler bei der Messung der Lufttemperatur auf Schiffen, besonders in den Tropen und einige andere Beobachtungen. p. 83–95.

Schwalbe, G., & Kassner, C. Der heisse und trockene Sommer 1911 in Norddeutschland. p. 96–109.

Hellmann, G[ustav]. Witterungsfolge nach heissen Sommern in Berlin. p. 109–115.

Kähler, K[arl]. Staubmessungen in Potsdam, auf dem Brocken und auf der Schneekoppe. p. 137–148.

Knoch, K[arl]. Ergebnisse der Temperatur- und Feuchtigkeitsregistrierungen an nahe benachbarten Turmstationen. p. 148–157.

Bötel, Th. Psychrometer-Studien zu Hildesheim. p. 158–168.

Marten, W[ilhelm]. Zur Frage der Sonnenscheinautographen und der Zuverlässigkeit ihrer Angaben. p. 168–179.

Budig, W[alter]. Einige Bestimmungen der Radioaktivität der Luft und der Hydrometeore auf dem Brocken. p. 179–184.

Budig, W[alter]. Mechanische Registrierung des mit Aetino-Elektroden gemessenen luftelektrischen Potentialgefälles. p. 185–190.

Meteorologische Zeitschrift. Braunschweig. Band 29. April 1912.

Hann, J[ulius] v. W. van Bemmelen: Die Windverhältnisse in den oberen Luftschichten nach Ballonvisierungen in Batavia. p. 145–150.

Lenard, P., & Ramsauer, C. Über die Wirkungen ultravioletten Lichtes auf Gase unter besonderer Berücksichtigung der Vorgänge in der Erdatmosphäre. p. 150–157.

Hann, J[ulius] v. Hepworth und Shaw über die Passate des Atlantischen Ozeans und das Klima von St. Helena. p. 157–163.

Wallenböck, R. Die klimatischen Unterschiede auf Nord- und Südlehnen in ihrer Beziehung zum Wassergehalte des mit Altholz bestandenen oder abgestockten Waldbodens. p. 164–166.

Hopfner, F[riedrich]. Zur Frage stellarer Ursachen von Klimaschwankungen. p. 169–170.

Aganin, M. Über die Simpsonsche Gewittertheorie. p. 171–173.

Wegener, Kurt. Randgebiete tiefen Luftdruckes. I. p. 178–181.

Arroya, E. Almeida. Windfahne mit Dämpfung. p. 181.

Schwalbe, G[ustav]. Über die bei der Reduktion der Temperatur auf das Meeresniveau für Norddeutschland erreichbare Genauigkeit. p. 181–184.

Petermanns Mitteilungen. Gotha. 58. Jahrgang. März 1912.

Nölke, F[riedrich]. Wurde die Eiszeit durch eine Temperaturniedrigung hervorgerufen oder nicht? p. 121–124.

——— Die Wirkung der grossen Hitze- und Dürrezeit 1911 auf die Seenverdunstung. p. 124–126.

Hess, Hans. Die temporäre Schneegrenze in den schweizer Alpen p. 148–149. [Abstract of 3 articles by Maurer.]

Physikalische Zeitschrift. Leipzig. 13. Jahrgang. 15. April 1912.

Knoche, Walter. Bestimmung der elektrischen Zerstreuung der Ionendichte und -geschwindigkeit, sowie der elektrischen Leitfähigkeit der Luft zwischen der chilenischen Küste und der Osterinsel. p. 322–332.

Weltall. Berlin. 12. Jahrgang. 2. Märzheft. 1912.

Grosse, [Ernst]. Astrometeorologie. p. 172–177.

Wetter. Berlin. 29. Jahrgang. März 1912.

Hammann, L. Hitze und Trockenheit im Sommer 1911 im Grossherzogtum Hessen. p. 49–56.

Wetter. Berlin. 29. Jahrgang. März 1912—Contnued.

Grosse, —. Über die Messung der Lufterneuerung in geheizten Räumen. p. 56–58.

Meissner, Otto. Noch einige Bemerkungen über das Klima von Potsdam. p. 62–64.

Diesner, P. Hochwasser-Nachrichten aus der Südosthälfte Asiens im Sommer 1911. p. 64–67. [Describes storms and rainy weather in many parts of Asia coinciding with the period of heat and drought in Europe.]

Liese, G. Brummen der Telegraphendrähte. p. 69.

Less, E[mil]. Über die Aufstellung besonderer Wetterprognosen von kurzer Geltungsdauer. p. 70–76. [Describes arrangements in Germany for short-period afternoon and evening forecasts for aeronauts.]

Koninklijk Nederlandsch meteorologisch instituut. Mededeelingen en verhandlingen. Utrecht. Nr. 12. 1912.

Gallé, P. H. Étude critique sur la méthode de prévision du temps de Guilbert. p. 3–25.

Académie impériale des sciences. Bulletin. St. Pétersbourg. 6 sér. no. 4. 1912.

Strokovskĭĭ, V. A. Sur le climat de Urumci. p. 341–360.

Sociedad Cubana de ingenieros. Revista. Habana. v. 4. Abril 1912.

Brodermann, Jorge. Observaciones mareograficas y meteorologicas en el puerto de Isabela de Sagua. p. 89–119.

Società meteorologica Italiana. Bolletino bimensuale. Torino. v. 31. Dicembre 1911–Gennaio 1912.

Gentile, Carlo, & Parodi, Roberto. Por lo studio delle correnti elettro-telluriche. p. 1–6.

Negro, Carlo. Questioncelle sulla precipitazione atmosferica. p. 6–10.

REORGANIZATION OF GOVERNMENT METEOROLOGICAL WORK IN CHILE.

On January 1, 1911, the meteorological services of Chile were united under the direction of Dr. Walter Knoche, the director of the newly established "Instituto Central Meteorológico y Geofísico de Chile." The meteorological stations formerly under the minister of education were transferred to the care of Dr. Knoche on May 1, 1910, and the service lately under the minister of marine was similarly transferred on January 1, 1911. Complete instrumental outfits were at once ordered for both the Central Observatory and the country stations, and it is probable that they are now well equipped. It is difficult to secure many reliable observers at present, but it is planned to establish observing stations as well distributed as possible over the whole country; the agricultural and industrial districts in the south of the Republic to be especially cared for.

Four orders of stations are to be established, as follows:

First order stations.—Completely equipped with self-registering instruments. These stations will be located at Punta Arenas, Valdivia, Santiago, Valparaiso, a mine in Atacama, and a temporary station on Easter Island.

Second order stations—Equipped with barograph, thermograph, hygrograph, and pluviograph.

Third order stations—Having a full equipment for direct eye observations, the readings to be made at 7^h, 14^h, and 21^h.

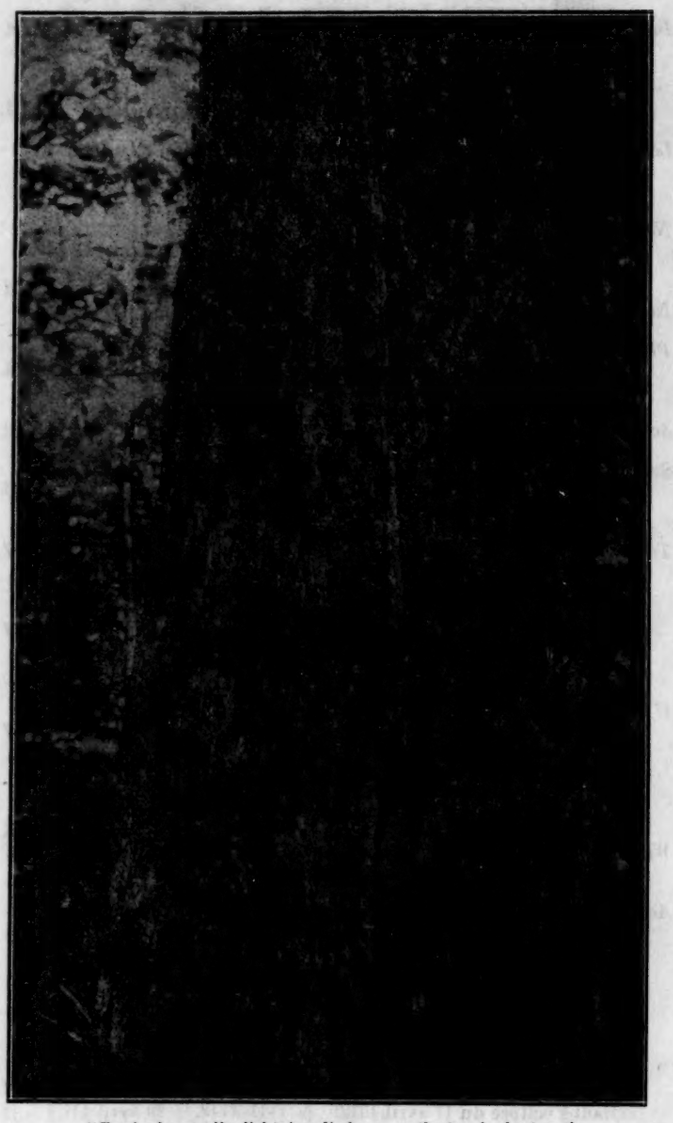
Fourth order stations—Recording temperature and precipitation only, these to be supplemented by a larger number of "precipitation-thunderstorm" stations.

Plans are making for investigations in atmospheric electricity, complementary to those made during 1909 in the Bolivian Andes by Dr. Knoche. It is also hoped that there will soon be provided means for carrying on studies in the physics of the atmosphere, aerology, etc. At present there are neither funds for apparatus nor the necessary trained assistants to prosecute such work effectively.

A PECULIAR STROKE OF LIGHTNING.

A letter from Mr. Norman N. Mason, Plattsburg, N. Y., dated April 29, 1912, contains the following account of what appears to have been a most unusual illustration of the peculiar action of lightning. The accompanying reproduction of a photograph showing the track of the discharge down a portion of the tree struck, graphically illustrates the usual character of the stroke:

I inclose a photographic print of the track of a lightning discharge on the trunk of a pine tree. This tree stands to the left and very near the road to Willsboro Point just after passing the McCann house going north in Willsboro, Essex County, N. Y. The two tracks are alike in section and appear to be of uniform depth, width, and distance between the two tracks. The cross section of each single track resembles the letter U, with the bottom of the curve in the sap wood which is hardly splintered. Each track looks as if it had been cut with a sharp gouge. Pieces of the outer cork bark were thrown more than 60 feet from the tree. With a good glass I can discover no broken branches or other injury to the tree except this double track. The track from the top of the tree to the ground passes in the opposite direction to the movement of the hands of a watch, nearly once and a quarter times around the tree. The double track is thirteen-sixteenths of an inch wide. The tree was struck at 9 p. m., September 25, 1909. There was apparently but one discharge at that time.



"Track of a peculiar lightning discharge on the trunk of a tree."

CONDENSED CLIMATOLOGICAL SUMMARY.

In the following table are given, for the various sections of the Climatological Service of the Weather Bureau, the average temperature and rainfall, the stations reporting the highest and lowest temperatures with dates of occurrence, the stations reporting the greatest and least monthly precipitation, and other data, as indicated by the several headings.

The mean temperatures for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperature and precipitation are based only on records from stations that have 10 or more years of observations. Of course the number of such records is smaller than the total number of stations.

CONDENSED CLIMATOLOGICAL SUMMARY OF TEMPERATURE AND PRECIPITATION BY SECTIONS.

Temperature and precipitation by sections, April, 1912.

Section.	Temperature (°F.).							Precipitation (in inches and hundredths).					
	Section average.	Departure from the normal.	Monthly extremes.					Section average.	Departure from the normal.	Greatest monthly.		Least monthly.	
			Station.	Highest.	Date.	Station.	Lowest.	Date.			Station.	Amount.	Station.	Amount.
Alabama	64.6	+ 1.6	Livingston	90	22	Riverton	31	8	10.00	+ 5.99	Mobile	17.32	Valley Head	5.94
Arizona	55.5	− 5.3	Maricopa	96	29	Williams	2	1	0.74	+ 0.42	Roosevelt	2.78	3 stations	0.00
Arkansas	61.9	+ 0.8	Jonesboro	93	15	Bergman (No. 2)	26	1†	8.14	+ 3.59	Stuttgart	12.94	Fort Smith	2.60
California	51.9	− 5.1	Heber	92	30	Tamarack	−14	22	3.07	+ 1.28	Upper Mattole	13.86	2 stations	0.00
Colorado	39.7	− 3.2	2 stations	85	30	Hermit	−12	22	1.55	− 0.58	Hermit Lake	7.64	Eads	T.
Florida	72.8	+ 3.5	Fort Meade	96	15†	Molino	40	4	4.45	+ 1.91	Blountstown	17.50	Fort Myers	0.20
Georgia	65.2	+ 2.0	Valdosta	93	28	Mineral Bluff	28	4	7.21	+ 3.66	Cuthbert	12.43	Hartwell	2.76
Hawaii (March)	68.1	.....	Pahala, Hawaii	88	6	Humuula, Hawaii	25	6	6.53	.....	Honomu, Hawaii	30.52	Puuloa, Oahu	0.08
Idaho	44.6	− 2.2	Garnet	84	9	Driggs	− 7	20	2.29	+ 0.62	Middle Fork	6.05	Leadore	0.66
Illinois	53.3	+ 1.9	4 stations	86	15	2 stations	20	19	4.93	+ 1.44	Carlinville	8.60	Dakota	0.69
Indiana	53.6	+ 2.4	2 stations	87	11†	Salamonia	13	3	5.01	+ 1.88	Jeffersonville	8.66	Rochester	2.21
Iowa	49.9	+ 1.4	Inwood	84	5	2 stations	20	3†	2.66	− 0.17	Creston	5.66	Waverly	0.78
Kansas	54.5	− 0.2	Ashland	93	30	Farnsworth	16	18	2.68	+ 0.04	Walnut	9.44	Russell Springs	0.27
Kentucky	58.4	+ 2.4	Beaver Dam	87	13	2 stations	25	4†	7.87	+ 4.22	Alpha	13.66	Catlettsburg	5.18
Louisiana	68.4	+ 1.2	Liberty Hill	92	13	Grand Cane	32	3	7.04	+ 2.19	Pearl River	23.43	Morgan City	1.03
Maryland and Delaware	54.7	+ 2.9	Westernport, Md	87	15	Deer Park,, Md	21	8	2.73	− 0.49	Grantsville, Md	4.73	Solomons, Md	1.31
Michigan	43.2	+ 0.8	Grass Lake	86	7	2 stations	− 1	1	2.18	− 0.10	Ann Arbor	3.96	St. Ignace	0.18
Minnesota	45.5	+ 2.9	2 stations	86	5	Itasca State Park	6	1	2.17	0.00	Fosston	11.16	Fort Ripley	0.40
Mississippi	65.5	+ 1.2	Charleston	92	26	Charleston	34	3	10.37	+ 6.12	Merrill	20.16	2 stations	5.47
Missouri	56.0	+ 1.1	Caruthersville	97	15	Crocker	24	8	5.98	+ 1.95	Caruthersville	12.18	Oregon	1.18
Montana	43.9	+ 2.2	2 stations	82	10	Bowen	− 1	6†	1.58	+ 0.47	Nye	5.88	Plains	T.
Nebraska	49.7	+ 0.2	2 stations	88	5	Hillside	12	19	2.18	− 0.15	Loyal	4.50	Grant	0.91
Nevada	43.4	− 3.6	Logan	84	7	2 stations	11	12	1.27	+ 0.54	Arthur	5.28	Tecoma	0.04
New England	44.0	+ 0.3	Orono, Me	81	25	Bloomfield, Vt	5	4	3.51	+ 0.62	Colchester, Conn	5.11	Manchester, Vt	0.71
New Jersey	50.4	+ 1.3	2 stations	82	6†	Culver's Lake	18	4	3.56	+ 0.08	Belvidere	6.02	Cape May	1.81
New Mexico	47.3	− 4.3	Carlsbad	96	30	Chama	4	14	0.92	0.00	Anchor Mine	7.30	Rodeo	0.00
New York	43.3	− 0.4	Windham	84	16	North Lake	− 8	4	3.81	+ 0.92	Liberty	7.41	Chazy	1.58
North Carolina	60.1	+ 3.4	Lumberton	90	15	Banners Elk	20	4	4.05	+ 0.29	Highlands	7.59	Belhaven	1.30
North Dakota	44.4	+ 3.1	Forman	88	4	.....	.....	.....	2.34	+ 0.87	McLeod	4.10	Pembina	0.90
Ohio	51.9	+ 2.5	Ironton	89	12	Bellefontaine	15	3	4.47	+ 1.46	New Alexandria	8.10	Wauseon	1.82
Oklahoma	59.8	− 0.1	Eldorado	96	30	Hooker	25	7	4.24	+ 1.65	Enid	10.01	Hurley	0.78
Oregon	47.3	− 1.7	Huntington	90	9	Yonna	12	5	2.79	+ 0.31	Happy Home	12.34	Buena Vista	0.16
Pennsylvania	50.2	+ 2.3	3 stations	83	12†	2 stations	18	4†	4.39	+ 1.12	2 stations	7.31	Hanover	2.41
Porto Rico	74.5	− 0.7	Rio Blanco	94	1†	Maricao	50	13	6.10	+ 0.97	San German	16.79	Isabela	2.30
South Carolina	64.3	+ 2.1	2 stations	91	28†	Greenville	32	3	4.24	+ 1.42	Beaufort	8.43	Conway	2.04
South Dakota	48.4	+ 2.9	Kadoka	89	10	Armour	14	18	3.05	+ 1.21	Rosiyn	7.77	Timber Lake	0.79
Tennessee	60.6	+ 2.8	Cedar Hill	88	14	Mountain City	22	4	9.60	+ 5.21	Perryville	14.80	Mountain City	5.16
Texas	65.8	− 0.6	5 stations	100	21†	Piemons	23	7	2.87	− 0.21	Beaumont	9.37	Theodore	0.17
Utah	43.2	− 4.2	Green River	88	24	2 stations	− 3	13†	1.44	+ 0.47	Ogden	4.10	Hanksville	0.03
Virginia	57.3	+ 3.5	Arvonia	85	12	Hot Springs	19	4	3.42	+ 0.02	Big Stone Gap	10.47	Culpeper	1.64
Washington	48.3	− 0.5	Colfax	82	10	Colville	21	21	2.17	− 0.24	Quinlault	7.86	Lost Creek	0.10
West Virginia	55.4	+ 4.1	Bancroft	88	12†	Beckley	20	7†	4.03	+ 0.38	Princeton	8.00	Upper Tract	1.09
Wisconsin	45.3	+ 2.1	New Richmond (1)	80	5	Long Lake	9	3	2.21	− 0.51	Koepenick	4.89	Oshkosh	0.69
Wyoming	37.1	− 2.0	Hyattville	79	9	Grand Canyon	−15	6	1.86	− 0.09	Woodrock	8.85	Pinedale	0.06

† Other dates also.

TABLE I.—*Climatological data for United States Weather Bureau stations, April, 1912.*

Districts and stations.	Elevation of instruments.			Pressure in inches.			Temperature of the air, in degrees Fahrenheit.									Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity, per cent.	Precipitation, inches.			Wind.				Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.	Snow on ground at end of month.
	Barometer above sea level, feet.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. ÷ 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.				Total.	Departure from normal.	Days with 0.01, or more.	Total movement, miles.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.						
New England.							**43.9**	**+ 0.3**										**75**	**3.27**	**+ 0.2**									**6.3**		
Eastport	76	67	85	29.85	29.94	+0.01	39.2	+ 0.9	64	21	46	16	9	32	27	35	32	79	3.06	+ 0.1	12	8,790	w.	48	ne.	3	13	6	11	5.5	9.7	....
Greenville	1,070	6	....	28.75	29.93	....	35.0	....	65	16	45	9	10	25	33	....	....	....	2.87	....	11	....	....	....	....	....	....	....	....	....	8.2	....
Portland, Me	103	81	117	29.84	29.97	+ .01	42.5	− 0.5	73	16	50	23	9	35	32	37	29	65	3.49	+ 0.4	14	7,286	w.	36	nw.	23	9	7	14	6.2	5.2	....
Concord	288	70	79	29.66	29.98	− .01	44.2	+ 0.4	78	16	55	22	4	33	41	....	....	....	2.58	− 0.2	15	4,904	nw.	30	nw.	23	7	12	11	6.1	7.3	....
Burlington	404	11	48	29.53	29.98	− .01	40.6	− 0.1	72	16	50	18	1	31	38	....	....	....	2.97	+ 1.1	12	8,773	s.	48	s.	27	10	6	14	5.6	6.9	....
Northfield	876	16	60	29.01	29.98	− .01	39.2	− 1.0	71	16	50	18	9	28	42	35	30	71	1.95	− 0.1	15	6,615	s.	32	s.	26	10	8	12	5.8	6.9	....
Boston	125	115	188	29.84	29.98	+ .01	47.4	+ 2.1	77	16	56	27	4	39	36	42	36	70	3.07	− 0.5	19	8,354	w.	37	nw.	23	4	8	18	7.1	0.5	....
Nantucket	12	14	90	29.98	29.99	+ .02	44.5	+ 0.3	62	26	50	28	4	39	18	42	39	85	2.91	+ 0.3	17	12,890	sw.	50	sw.	7	6	12	12	6.1	T.	....
Block Island	26	11	46	29.96	29.99	+ .01	43.8	0.0	60	16	49	29	4	39	16	41	38	85	3.85	+ 0.2	17	13,727	sw.	54	w.	23	7	8	15	6.9	....	....
Narragansett	....	9	....	....	....	....	44.1	− 0.5	67	16	52	24	4	36	24	....	....	....	5.09	....	19	....	sw.	....	....	....	12	7	11	....	....	....
Providence	160	141	163	29.82	30.00	+ .02	46.5	− 0.1	76	6	55	24	4	38	35	41	36	73	3.61	− 0.2	17	8,801	nw.	50	w.	23	5	13	12	6.5	T.	....
Hartford	159	122	140	29.82	30.00	+ .01	47.2	+ 0.5	78	6	56	26	4	38	41	41	36	72	3.93	+ 0.4	17	6,649	nw.	36	nw.	23	3	10	17	7.1	T.	....
New Haven	106	116	155	29.88	30.00	+ .01	47.5	+ 1.1	77	6	56	25	4	39	34	42	36	71	4.56	+ 1.0	16	6,557	s.	37	w.	23	3	14	13	6.9	T.	....
Middle Atlantic States.							**52.2**	**+ 1.7**										**72**	**2.87**	**− 0.2**									**6.0**		
Albany	97	102	115	29.88	29.99	+ .01	45.8	0.0	76	6	55	24	4	37	40	40	36	72	3.31	+ 0.9	17	6,537	nw.	36	se.	15	9	10	11	5.6	5.7	....
Binghamton	871	78	88	29.06	30.01	− .01	44.4	0.0	75	6	53	20	4	35	36	....	....	....	4.19	+ 1.9	18	5,209	nw.	31	s.	26	1	8	21	8.0	4.2	....
New York	365	414	454	29.67	30.01	+ .01	49.0	+ 0.9	74	6	57	27	4	40	32	42	36	68	3.61	+ 0.3	16	14,926	nw.	84	nw.	23	7	11	12	6.4	T.	....
Harrisburg	374	94	104	29.62	30.03	+ .01	51.8	+ 1.1	77	6	61	31	8	43	37	45	40	71	3.95	+ 1.5	14	6,438	nw.	36	w.	24	6	8	16	6.8	T.	....
Philadelphia	117	123	184	29.90	30.03	+ .02	52.5	+ 1.7	77	6	62	32	4	44	32	46	40	69	2.89	0.0	15	8,704	nw.	39	nw.	7	6	11	13	6.5	T.	....
Scranton	805	111	119	29.14	30.01	.00	47.8	+ 0.7	78	16	57	25	3	38	36	42	37	69	3.78	+ 1.1	17	6,314	s.	39	sw.	24	3	11	16	7.0	0.3	....
Atlantic City	52	37	48	29.98	30.04	+ .04	48.4	+ 0.8	63	24	54	28	4	42	21	44	41	80	2.59	− 0.4	13	6,996	sw.	34	nw.	23	8	8	14	6.1	....	....
Cape May	18	13	49	30.03	30.05	+ .06	50.0	+ 1.6	66	24	56	33	4	44	24	46	44	84	1.81	− 1.2	13	7,646	s.	36	nw.	3	8	11	11	5.9	....	....
Baltimore	123	100	113	29.90	30.03	+ .02	54.6	+ 1.6	80	6	64	32	4	46	34	49	43	69	1.94	− 1.3	14	5,758	sw.	34	s.	2	9	10	11	5.4	....	....
Washington	112	62	85	29.90	30.02	.00	55.6	+ 2.5	81	12	66	31	4	46	36	49	42	65	2.33	− 0.9	12	6,431	s.	43	nw.	2	9	6	15	6.0	....	....
Lynchburg	681	83	88	29.30	30.04	+ .02	59.0	+ 3.4	82	12	70	34	4	48	37	52	47	70	1.80	− 1.3	10	3,830	sw.	28	nw.	2	9	12	9	5.6	....	....
Mount Weather	1,725	10	54	28.17	30.00	− .02	50.6	+ 2.2	75	12	59	27	8	42	37	46	41	74	2.19	− 0.9	10	14,007	nw.	77	nw.	2	7	6	17	6.7	T.	....
Norfolk	91	102	111	29.97	30.07	+ .06	61.0	+ 5.0	83	29	70	39	9	52	35	54	49	71	2.78	+1.0	10	8,541	s.	42	nw.	3	12	7	11	5.3	....	....
Richmond	144	189	197	29.90	30.05	+ .03	59.6	+ 2.4	82	12	70	34	4	49	3	52	45	61	2.17	− 1.3	10	7,042	s.	43	w.	2	12	6	12	5.1	....	....
Wytheville	2,293	40	47	27.68	30.05	+ .02	53.4	+ 1.4	78	12	65	28	4	42	37	49	45	77	3.61	0.0	12	4,382	w.	40	w.	2	15	12	3	3.7	T.	....
South Atlantic States.							**64.4**	**+ 3.1**										**75**	**3.91**	**+ 0.5**									**5.3**		
Asheville	2,255	53	75	27.73	30.07	+ .04	55.9	+ 2.0	76	12	66	30	9	46	39	50	46	73	4.17	+ 0.1	11	7,491	se.	35	s.	26	11	6	13	5.5	....	....
Charlotte	773	68	76	29.24	30.08	+ .05	61.4	+ 2.2	80	15	70	39	8	52	31	55	50	72	3.92	+ 0.5	11	5,500	s.	35	sw.	2	9	7	14	6.1	....	....
Hatteras	11	12	47	30.08	30.09	+ .08	63.2	+ 5.2	77	29	69	44	4	57	25	58	55	78	2.55	− 1.8	10	11,093	sw.	60	s.	22	13	11	6	3.8	....	....
Manteo	12	12	46	....	....	....	61.0	....	80	29	69	35	4	52	....	....	....	....	1.83	− 2.8	8	....	sw.	....	....	....	19	4	7	....	....	....
Raleigh	376	103	110	29.67	30.07	+ .04	62.6	+ 3.6	83	29	72	39	4	53	28	54	48	67	3.74	+ 0.3	12	6,935	sw.	39	nw.	29	11	7	12	5.3	....	....
Wilmington	78	81	91	30.02	30.10	+ .07	64.2	+ 3.8	81	30	72	42	9	56	27	58	54	77	2.73	− 0.1	10	6,382	sw.	36	sw.	2	11	12	7	4.8	....	....
Charleston	48	11	92	30.05	30.10	+ .07	67.0	+ 3.2	88	30	73	50	9	61	18	61	58	77	4.92	+ 1.9	8	7,463	s.	67	se.	20	8	11	11	5.7	....	....
Columbia, S. C	351	41	57	29.71	30.09	+ .06	65.0	+ 2.2	83	29	74	40	9	56	32	57	51	68	2.77	− 0.1	12	5,756	sw.	40	sw.	2	9	7	14	5.6	....	....
Augusta	180	89	97	29.89	30.08	+ .05	65.6	+ 2.4	85	29	75	43	9	56	30	59	54	72	5.60	+ 2.1	13	4,731	se.	32	sw.	2	7	11	12	5.7	....	....
Savannah	65	150	194	30.03	30.10	+ .07	67.8	+ 3.1	85	30	75	51	8	61	21	61	58	81	5.78	+ 2.8	9	8,091	se.	53	w.	22	10	11	9	5.2	....	....
Jacksonville	43	96	129	30.05	30.10	+ .06	70.8	+ 3.2	87	22	79	51	4	63	21	64	62	81	4.96	+ 2.2	11	7,124	ne.	46	sw.	18	12	13	5	4.9	....	....
Florida Peninsula.							**76.6**	**+ 3.8**										**79**	**1.88**	**+ 0.1**									**4.9**		
Key West	22	10	53	30.02	30.04	+ .02	79.2	+ 3.7	87	22	83	68	5	75	11	73	71	78	0.25	− 1.0	4	6,285	se.	24	e.	26	12	18	0	4.2	....	....
Miami	25	37	72	30.05	30.08	....	77.8	+ 3.6	89	3	83	63	8	72	19	71	68	76	5.61	+ 3.0	9	7,726	se.	30	ne.	24	1	18	11	6.8	....	....
Sand Key	23	39	72	29.99	30.02	.00	77.6	....	87	30	80	70	5	76	10	74	72	82	0.35	− 0.9	5	10,869	e.	41	e.	26	16	13	1	3.8	....	....
Tampa	35	79	96	30.04	30.08	+ .02	74.3	+ 3.7	90	27	83	54	4	66	26	68	66	79	1.31	− 0.5	5	6,175	ne.	38	w.	18	10	14	6	4.8	....	....
Titusville	25	6	....	30.05	30.10	....	75.0	+ 4.0	94	22	84	54	6	66	28	....	....	....	4.39	....	15	....	e.	....	....	....	8	17	5	5.1	....	....
East Gulf States.							**65.9**	**+ 1.3**										**77**	**10.40**	**+ 6.3**									**6.3**		
Atlanta	1,174	190	216	28.84	30.08	+ .05	61.9	+ 0.8	80	11	71	39	3	53	28	56	52	74	6.65	+ 3.0	13	8,525	se.	48	se.	17	9	5	16	6.5	....	....
Macon	370	78	87	29.69	30.09	+ .06	65.5	+ 2.4	84	29	75	42	9	56	32	60	56	74	8.14	+ 4.7	13	4,776	s.	31	s.	17	12	6	12	5.4	....	....
Thomasville	273	8	57	29.78	30.07	+ .04	68.6	+ 1.9	88	15	79	43	4	58	30	62	58	78	10.33	+ 6.7	8	4,044	e.	26	sw.	22	9	12	9	5.7	....	....
Pensacola	56	140	183	29.99	30.05	+ .03	67.5	− 0.2	79	30	73	50	3	62	20	64	61	84	11.02	+ 7.9	13	10,410	se.	56	s.	17	7	4	19	6.8	....	....
Anniston	741	9	57	29.29	30.08	+ .05	62.6	+ 2.2	82	28	73	39	19	52	35	....	....	....	8.35	+ 4.7	13	4,803	se.	32	ne.	27	10	8	12	5.7	....	....
Birmingham	700	11	48	29.30	30.07	+ .05	63.3	− 0.2	81	28	73	39	3	54	30	56	52	72	8.92	+ 5.2	12	6,242	s.	27	s.	2	10	9	11	5.5	....	....
Mobile	57	98	106	29.98	30.04	+ .02	67.9	+ 1.9	87	22	75	49	3	61	24	62	60	81	17.32	+13.0	11	6,415	se.	43	se.	17	6	11	13	6.1	....	....
Montgomery	223	100	112	29.82	30.07	+ .04	66.0	+ 0.8	85	28	75	44	3	57	27	59	55	74	15.94	+11.7	12	5,213	se.	31	se.	17	6	9	15	6.7	....	....
Meridian	375	84	93	29.64	30.03	+ .01	64.8	+ 0.7	85	28	75	41	9	55	31	59	55	76	9.44	+ 4.4	13	4,676	s.	39	sw.	29	7	9	14	6.4	....	....
Vicksburg	247	62	74	29.75	30.03	+ .03	66.0	+ 0.8	84	27	74	46	3	58	26	60	56	75	9.71	+ 4.6	13	5,572	se.	34	sw.	28	9	9	12	6.1	....	....
New Orleans	51	90	121	29.97	30.02	+ .02	70.4	+ 2.5	86	29	78	51	3	63	25	65	63	83	8.62	+ 3.7	16	7,297	s.	30	sw.	15	3	6	21	8.0	....	....
West Gulf States.							**65.6**	**− 0.2**										**74**	**4.61**	**+ 1.1**									**5.9**		
Shreveport	249	77	84	29.73	30.00	+ .03	66.0	+ 0.2	85	14	75	45	3	57	26	59	55	73	7.49	+ 2.9	12	4,796	se.	23	nw.	1	7	7	16	6.5	....	....
Bentonville	1,303	11	44	28.59	29.96	.00	57.7	+ 0.8	79	12	68	34	2	47	35	....	....	....	7.54	+ 3.6	12	5,131	s.	23	s.	26	16	6	8	4.4	T.	....
Fort Smith	457	79	94	29.47	29.95	− .01	62.0	+ 0.3	85	26	72	39	18	52	34	53	46	65	2.60	− 1.3	8	6,988	e.	44	w.	28	8	10	12	5.7	....	....
Little Rock	357	139	147	29.61	29.99	+ .01	62.8	+ 0.1	84	13	71	42	3	55	30	56	50	70	10.76	+ 6.2	15	7,233	e.	40	s.	21	9	10	11	5.9	....	....
Brownsville	57	4	....	....	....	....	74.8	....	97	21	83	52	3	66	27	....	....	....	1.76	....	3	....	....	48	se.	26	....	....	....	....	....	....
Corpus Christi	20	69	77	29.92	29.94	− .01	70.2	− 0.7	88	16	75	53	8	66	19	67	66	90	1.57	− 0.2	9	10,175	se.	47	se.	28	3	12	15	7.0	....	....
Fort Worth	670	106	114	29.23	29.94	.00	64.5	− 0.8	88	15	74	43	3	55	32	56	49	64	3.20	+ 0.6	8	8,705	s.	50	s.	27	9	11	10	5.6	....	....
Galveston	54	106	112	29.94	29.99	+ .02	68.4	− 0.3	83	29	72	53	7	65	15	65	63	87	4.29	+ 1.2	7	8,871	se.	48	nw.	16	5	9	16	6.7	....	....
Houston	138	111	121	29.83	29.98	....	69.2	− 0.4	86	21	76	47	3	62	25	....	....	....	6.62	....	9	6,980	se.	39	se.	28	7	9	14	6.5	....	....
Palestine	510	64	72	29.45	29.98	+ .02	65.4	− 0.5	84	14	74	44	2	57	30	58	54	72	4.43	+ 0.4	10	5,836	s.	30	se.	28	8	14	8	5.2	....	....
San Antonio	701	80	91	29.21	29.94	+ .01	68.6	− 0.4	90	21	78	42	3	59	33	61	56	72	1.78	− 1.2	11	4,724	se.	44	n.	7	8	10	12	5.9	....	....
Taylor	583	55	63	29.36	29.97	+ .02	66.7	− 0.8	87	14	76	40	3	57	31	....	....	....	2.41	− 1.6	9	6,614	s.	48	n.	20	8	9	13	6.0	....	....
Ohio Valley and Tennessee.							**56.9**	**+ 2.2**										**69**	**6.44**	**+ 2.8**									**5.8**		
Chattanooga	702	189	213	29.27	30.08	+ .05	61.0	+ 1.0	80	12	70	39	19	51	33	55	51	75	9.55	+ 5.2	15	6,912	s.	44	s.	26	6	9	15	6.5	....	....
Knoxville	996	93	100	29.00	30.06	+ .03	59.6	+ 2.2	82	12	70	35	4	49	34	52	47	68	7.98	+ 3.3	13	4,042	sw.	31	w.	2	6	13	11	5.5	....	....
Memphis	399	76	97	29.61	30.03	+ .02	62.6	+ 0.8	81	14	70	45	8	56	22	56	50	68	8.01	+ 3.2	12	6,399	s.	47	sw.	28	11	4	15	5.7	....	....
Nashville	546	108	191	29.46	30.05	+ .04	60.1	+ 1.0	80	12	70	35	19	51	32	54	49	73	11.73	+ 7.4	14	7,803	s.	50	nw.	26	4	13	13	6.2	....	....
Lexington	989	75	102	28.95	30.02	.00	56.6	+ 2.9	80	12	66	33	8	47	33	....	....	....	6.89	+ 3.6	14	8,604	s.	60	w.	2	9	7	14	6.0	....	....
Louisville	525	111	132	29.44	30.02	+ .01	59.2	+ 3.0	85	15	69	36	3	50	37	51	44	62	8.60	+ 4.5	16	6,649	sw.	42	nw.	7	6	11	13	6.0	....	....
Evansville	431	72	82	29.54	30.01	+ .01	58.2	+ 1.8	81	15	66	37	3	50	25	52	47	71	7.02	+ 3.6	15	6,043	s.	37	s.	25	10	12	8	5.3	....	....

TABLE I.—*Climatological data for United States Weather Bureau stations, April, 1912*—Continued.

Districts and stations.	Elevation of instruments.			Pressure in inches.			Temperature of the air, in degrees Fahrenheit.										Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity, per cent.	Precipitation, inches.			Wind.				Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.	Snow on ground at end of month.
	Barometer above sea level, feet.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. ÷ 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.					Total.	Departure from normal.	Days with 0.01, or more.	Total movement, miles.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.					
***Ohio Valley and Tennessee*—Continued.**																															
Indianapolis	822	154	164	29.11	30.00	.00	53.9	+ 1.5	79	15	63	29	3	45	33	47	42	69	4.62	+ 1.2	14	9,065	s.	46	se.	26	9	10	11	5.8	1.0	
Cincinnati	628	152	160	29.34	30.02	+ .01	56.9	+ 2.6	82	15	66	30	3	48	33	50	43	65	5.62	+ 2.7	15	5,334	sw.	28	w.	22	10	8	12	5.9	T.	
Columbus	824	173	222	29.13	30.01	− .01	53.4	+ 2.4	79	15	63	28	3	44	31	47	42	70	4.20	+ 1.3	15	10,196	sw.	54	nw.	7	9	10	11	5.4	0.8	
Dayton	899	181	216	29.03	29.99	.....	53.6	+ 1.9	80	15	63	23	3	44	31	48	44	75	4.94	+ 2.0	14	10,207	sw.	57	sw.	22	11	9	10	5.5	3.0	
Pittsburgh	842	353	410	29.10	30.01	− .01	52.6	+ 1.6	80	15	63	29	3	43	35	46	40	66	4.32	+ 1.4	16	10,494	sw.	50	nw.	7	7	13	10	5.8	2.5	
Parkersburg	638	77	84	29.38	30.04	+ .01	56.6	+ 3.6	83	15	68	31	4	46	37	50	46	74	4.02	+ 1.1	12	5,636	s.	36	nw.	7	10	10	10	5.6	T.	
Elkins	1,940	41	50	27.98	30.03	.00	52.7	+ 4.0	81	15	66	25	4	40	45	46	40	66	2.67	− 0.6	14	3,978	w.	34	w.	2	7	10	13	6.3	0.1	
Lower Lake region.							45.2	+ 0.1											74	3.09	+ 0.7									5.7		
Buffalo	767	178	206	29.14	29.98	− 0.3	42.2	− 0.1	73	15	51	20	3	34	37	39	35	79	3.39	+ 0.9	16	11,683	sw.	48	w.	15	4	12	14	6.8	4.5	
Canton	448	10	71	29.50	29.98	.....	40.6	− 1.9	69	15	51	16	4	30	44	.....	.....	.....	2.46	+ 0.2	14	9,855	s.	46	w.	27	10	12	8	5.2	3.8	
Oswego	335	76	91	29.61	29.98	− .03	41.6	− 1.6	75	15	50	22	3	34	32	38	34	76	2.92	+ 0.7	15	8,660	s.	36	nw.	23	8	9	13	5.8	5.5	
Rochester	523	86	102	29.42	30.00	− .02	44.0	+ 0.1	80	15	53	22	3	35	36	39	34	71	3.27	+ 0.8	15	7,285	w.	33	w.	23	7	8	15	6.5	6.9	
Syracuse	597	97	113	29.35	30.01	.00	43.3	− 1.1	75	6	52	20	4	34	38	.....	.....	.....	3.66	+ 1.4	18	10,198	nw.	50	s.	26	7	9	14	6.2	9.3	
Erie	714	92	102	29.21	29.99	− .03	45.5	+ 0.8	78	15	54	26	3	37	38	40	36	73	4.22	+ 1.8	13	9,858	w.	43	s.	26	7	13	10	6.0	6.1	
Cleveland	762	190	201	29.16	30.00	− .02	48.0	+ 2.0	77	15	57	22	3	39	34	42	37	72	3.68	+ 1.4	14	11,811	w.	58	s.	26	6	12	12	5.9	6.7	
Sandusky	629	62	70	29.31	30.00	− .02	47.6	+ 0.3	78	15	55	22	3	39	37	.....	.....	.....	2.43	− 0.1	13	7,920	sw.	36	nw.	22	11	7	12	5.3	2.4	
Toledo	628	208	246	29.30	29.99	− .02	48.4	+ 1.1	78	15	58	26	3	39	34	43	38	70	2.72	+ 0.4	13	13,391	sw.	57	sw.	26	13	7	10	5.0	T.	
Fort Wayne	856	113	124	29.08	29.99	.....	49.6	+ 0.3	78	12	59	25	3	40	33	45	42	78	2.44	.....	12	9,139	sw.	42	s.	26	13	8	9	4.7	T.	
Detroit	730	218	256	29.18	29.98	− .04	46.2	+ 0.7	75	15	55	26	3	37	33	41	36	71	2.17	− 0.2	11	12,241	nw.	50	w.	9	11	9	10	5.2	T.	
Upper Lake region.							41.9	+ 1.1											73	2.50	+ 0.2									5.5		
Alpena	609	13	92	29.30	29.97	− .05	39.4	+ 1.4	69	15	48	15	3	30	32	36	32	80	2.29	+ 0.1	11	9,360	nw.	48	sw.	15	5	18	7	5.8	2.3	
Escanaba	612	48	82	29.28	29.96	− .06	37.2	0.0	59	26	44	14	1	30	23	33	29	74	1.91	− 0.2	9	8,024	s.	36	nw.	26	7	14	9	5.9	T.	
Grand Haven	632	54	92	29.27	29.96	− .05	43.8	− 0.2	68	14	52	23	3	36	33	39	35	74	2.90	+ 0.5	13	10,566	s.	44	se.	26	15	7	8	4.4	1.6	
Grand Rapids	675	70	87	29.19	29.97	− .05	46.8	+ 0.6	74	6	57	23	3	37	32	41	36	71	2.46	0.0	10	6,321	w.	29	nw.	7	11	5	14	5.7	3.0	
Lansing	863	11	62	29.02	29.97	.....	45.6	0.0	72	6	56	22	3	35	32	40	36	72	3.12	+ 0.6	13	6,617	sw.	32	se.	26	11	7	12	5.5	T.	
Houghton	684	62	72	29.23	29.97	− .05	36.8	− 0.1	67	5	46	17	1	28	34	.....	.....	.....	2.49	+ 0.5	10	6,818	e.	42	nw.	26	13	5	12	5.6	8.6	
Marquette	734	77	116	29.16	29.98	− .04	38.0	+ 0.5	74	5	46	16	1	30	37	34	29	72	3.01	+ 1.0	12	8,593	nw.	48	sw.	26	6	14	10	6.1	4.4	
Port Huron	638	78	120	29.27	29.98	− .04	43.8	+ 1.6	72	15	53	21	3	35	33	39	36	78	3.10	+ 1.0	11	9,851	ne.	42	s.	26	9	12	9	5.6	0.2	
Sault Ste. Marie	614	11	61	29.27	29.98	− .05	35.9	+ 0.2	62	25	45	10	1	27	37	32	28	73	2.30	+ 0.2	12	7,871	nw.	50	w.	27	11	8	11	5.4	0.7	
Chicago	823	140	310	29.08	29.98	− .02	48.8	+ 2.9	75	14	57	31	2	41	31	43	38	70	2.55	− 0.3	9	11,907	sw.	51	s.	26	14	7	9	4.9	0.1	
Milwaukee	681	119	133	29.21	29.95	− .04	45.8	+ 4.9	73	14	54	29	18	37	34	40	35	72	1.72	− 1.0	11	9,731	sw.	48	sw.	6	11	12	7	4.9	6.6	
Green Bay	617	49	86	29.26	29.93	− .08	43.5	+ 2.8	67	6	53	23	3	34	31	38	33	71	2.06	− 0.4	10	10,453	ne.	55	sw.	26	6	12	12	6.5	T.	
Duluth	1,133	11	47	28.71	29.95	− .06	38.7	+ 0.3	74	5	47	21	1	30	34	34	29	70	2.58	+ 0.4	7	10,872	ne.	70	nw.	26	11	11	8	5.3	6.4	
North Dakota.							45.1	+ 4.4											67	2.21	+ 0.3									4.6		
Moorhead	940	8	57	28.90	29.92	− .07	46.0	+ 4.6	82	4	60	20	7	32	46	38	31	66	2.26	− 0.1	5	7,971	ne.	42	nw.	26	22	3	5	3.2	T.	
Bismarck	1,674	4	57	28.12	29.91	− .06	46.6	+ 4.0	78	10	60	23	21	33	44	39	32	65	2.30	+ 0.4	9	8,615	nw.	47	se.	30	12	9	9	4.8	0.1	
Devils Lake	1,482	11	44	28.32	29.91	− .08	42.8	+ 4.6	75	4	55	21	16	31	43	37	30	67	2.41	+ 0.4	11	9,825	ne.	42	e.	11	10	13	7	5.1	1.2	
Williston	1,896	40	47	27.89	29.89	− .07	44.9	+ 4.4	75	9	56	21	15	34	34	39	33	69	1.86	+ 0.6	9	6,932	n.	37	se.	10	7	14	9	5.6	4.0	
Upper Miss. Valley.							51.9	+ 1.4											69	3.77	+ 0.8									5.8		
Minneapolis	918	102	208	.....	.....	.....	48.6	.....	79	5	60	28	7	38	31	.....	.....	.....	2.22	− 0.2	6	10,060	s.	52	n.	21	15	4	11	4.6	0.5	
St. Paul	940	203	212	28.99	29.90	− .09	49.0	+ 3.3	77	5	60	28	7	38	32	41	34	61	2.60	+ 0.3	7	7,700	se.	42	nw.	6	13	12	5	4.9	1.0	
La Crosse	714	11	48	29.16	29.93	− .05	49.6	+ 2.3	75	5	61	26	3	38	35	.....	.....	.....	3.12	+ 0.8	10	5,463	s.	32	sw.	14	11	5	14	5.7	0.1	
Madison	974	70	78	28.90	29.96	− .03	46.7	+ 2.2	71	14	57	27	3	37	32	41	34	65	1.48	− 0.9	11	8,809	sw.	44	ne.	17	9	13	8	5.5	3.4	
Charles City	1,015	10	40	28.85	29.93	− .05	48.2	+ 1.9	73	5	59	26	3	37	39	43	39	74	2.41	− 0.4	9	6,890	s.	36	nw.	26	9	8	13	6.3	T.	
Davenport	606	71	79	29.29	29.95	− .03	51.2	+ 1.0	74	11	61	31	3	42	31	45	39	67	2.76	− 0.1	8	7,468	sw.	40	s.	26	10	12	8	5.1	7.8	
Des Moines	861	84	101	29.01	29.92	− .05	51.4	+ 0.8	74	5	61	32	3	42	28	45	39	68	2.75	− 0.2	11	7,864	sw.	43	sw.	14	10	12	8	4.9	T.	
Dubuque	698	100	115	29.21	29.96	− .02	49.8	+ 0.9	73	5	60	27	3	40	32	43	37	66	2.49	− 0.4	10	5,878	s.	23	nw.	23	10	12	8	5.4	5.0	
Keokuk	614	64	78	29.28	29.96	− .02	53.0	+ 1.0	76	5	62	32	18	44	31	47	42	71	2.41	− 0.9	10	7,313	sw.	42	sw.	25	11	11	8	5.1	T.	
Cairo	350	87	93	29.61	29.99	.00	59.0	+ 0.7	78	15	66	40	18	52	19	53	48	71	5.91	+ 2.3	15	6,944	s.	35	sw.	26	8	6	16	6.4	.....	
La Salle	536	56	64	29.40	29.98	− .01	50.6	+ 0.8	74	14	61	31	18	41	32	.....	.....	.....	2.98	− 0.1	9	8,123	sw.	37	sw.	26	11	9	10	5.1	5.5	
Peoria	609	11	45	29.31	29.98	− .01	51.5	+ 0.6	75	5	62	30	19	41	33	45	41	72	6.88	+ 3.6	12	7,250	s.	37	w.	6	8	16	6	5.4	4.5	
Springfield, Ill.	644	10	91	29.28	29.97	− .01	54.6	+ 2.6	78	6	55	32	3	45	33	47	42	69	5.39	+ 2.1	10	7,672	s.	48	s.	25	9	12	9	5.6	T.	
Hannibal	534	74	109	29.38	29.95	− .03	54.2	+ 0.6	78	5	64	31	3	45	30	.....	.....	.....	5.32	+ 2.1	10	8,241	sw.	47	s.	25	11	10	9	5.2	T.	
St. Louis	567	208	317	29.36	29.97	− .01	57.2	+ 1.1	80	14	66	34	2	48	26	51	46	73	7.84	+ 4.3	14	8,476	s.	50	se.	25	10	11	9	5.4	T.	
Missouri Valley.							52.6	+ 2.1											64	2.97	+ 0.1									5.1		
Columbia, Mo.	784	11	84	29.11	29.95	− .03	55.4	+ 1.1	80	5	65	34	17	46	31	.....	.....	.....	5.34	+ 1.6	16	7,309	s.	38	s.	25	9	8	13	5.9	0.1	
Kansas City	963	161	181	28.90	29.94	− .02	55.4	+ 1.1	78	12	64	35	17	47	33	48	41	64	1.53	− 1.8	7	10,463	s.	51	sw.	14	10	12	8	5.3	T.	
St. Joseph	967	11	49	28.89	29.94	.....	54.2	.....	79	12	64	33	17	45	34	47	41	66	1.84	.....	6	7,699	se.	37	w.	14	9	13	8	5.2	T.	
Springfield, Mo.	1,324	98	104	28.56	29.97	.00	55.4	− 0.3	79	13	65	32	2	46	29	49	43	69	5.87	+ 2.0	13	8,973	se.	44	se.	25	14	7	9	4.8	0.5	
Iola	984	11	50	28.90	29.95	.00	56.0	+ 1.8	80	12	66	35	7	46	37	.....	.....	.....	5.70	+ 2.9	12	6,727	s.	28	sw.	21	15	7	8	4.4	T.	
Topeka	963	85	101	.....	.....	.....	55.1	+ 1.4	80	5	65	34	7	45	36	.....	.....	.....	1.11	− 1.6	8	8,863	s.	40	sw.	6	12	12	6	4.9	.....	
Lincoln	1,189	11	84	28.64	29.90	− .04	52.9	+ 2.2	80	5	63	30	7	43	38	45	38	64	2.50	− 0.3	8	10,246	s.	46	s.	13	8	6	16	6.6	.....	
Omaha	1,105	115	121	28.73	29.92	− .03	52.8	+ 2.3	78	5	62	31	1	44	30	47	43	74	1.31	− 1.7	8	7,299	s.	34	n.	21	5	15	10	6.2	.....	
Valentine	2,598	47	54	27.16	29.88	− .06	48.2	+ 2.8	79	8	61	21	18	35	41	39	30	59	2.43	+ 0.1	8	9,182	nw.	42	nw.	14	16	12	2	3.5	T.	
Sioux City	1,135	94	164	28.68	29.90	− .05	50.4	+ 1.9	77	5	60	29	7	40	31	44	38	66	1.98	− 0.8	8	10,027	se.	48	s.	25	9	10	11	5.4	T.	
Pierre	1,572	70	75	28.22	29.88	− .07	50.8	+ 4.3	81	4	64	25	1	38	45	41	29	52	0.89	− 1.1	6	8,782	se.	48	e.	13	10	13	7	4.5	.....	
Huron	1,306	56	67	28.50	29.90	− .06	48.4	+ 3.8	81	4	62	16	1	35	47	41	33	64	3.76	+ 1.1	12	8,863	se.	41	nw.	5	13	8	9	4.6	0.1	
Yankton	1,233	49	57	28.57	29.89	− .06	49.8	+ 2.4	82	5	60	29	7	40	34	.....	.....	.....	3.19	+ 0.4	9	7,760	nw.	42	s.	13	13	6	11	4.9	T.	
Northern Slope.							44.1	+ 1.3											63	1.74	+ 0.2									5.3		
Havre	2,505	11	44	27.22	29.86	− .07	46.0	+ 3.3	73	10	59	26	6	33	44	40	35	73	1.36	+ 0.4	5	5,051	e.	36	w.	5	14	11	5	4.6	8.9	
Miles City	2,371	26	48	27.35	29.91	− .05	48.4	+ 3.7	82	10	61	21	16	36	42	42	36	70	2.48	+ 1.3	8	4,287	se.	29	w.	30	11	13	6	4.5	11.0	
Helena	4,221	87	114	25.67	29.87	− .10	44.4	+ 2.4	70	8	54	26	6	34	37	37	29	59	1.21	+ 0.1	10	5,839	sw.	42	s.	10	3	6	21	7.6	4.6	
Kalispell	2,962	11	34	26.80	29.85	− .11	45.8	+ 3.3	73	10	58	24	6	34	38	38	31	63	0.61	− 0.4	9	3,634	w.	21	sw.	29	7	18	5	5.3	T.	
Rapid City	3,234	46	50	26.48	29.90	− .05	47.3	+ 3.8	73	10	59	26	16	36	41	38	28	53	1.61	− 0.7	9	6,776	w.	35	nw.	13	12	8	10	5.0	2.8	
Cheyenne	6,088	56	64	23.88	29.89	− .02	40.2	− 1.4	62	5	51	17	22	30	41	33	25	60	1.62	− 0.2	7	8,363	nw.	62	nw.	13	10	15	5	4.8	14.1	T.
Lander	5,372	60	68	24.54	29.91	− .03	41.1	− 1.1	65	9	53	17	1	29	39	34	24	56	1.64	− 0.8	6	4,714	sw.	54	sw.	5	12	10	8	4.6	5.4	
Sheridan	3,790	9	47	25.98	29.90	.....	43.8	+ 0.4	73	10	56	24	15	31	42	36	29	65	1.23	.....	10	5,930	nw.	48	nw.	13	10	10	10	5.3	0.9	
Yellowstone Park	6,200	11	48	23.75	29.92	− .04	36.1	− 0.9	61	8	46	12	6	26	34	30	24	67	2.24	+ 0.9	15	5,727	sw.	38	sw.	29	5	14	11	6.1	16.1	
North Platte	2,821	11	51	26.98	29.91	− .01	48.2	− 0.8	80	5	62	22	18	34	44	40	33	64	2.93	+ 0.8	6	7,043	n.	42	sw.	13	9	16	5	5.0	0.1	

TABLE I.—*Climatological data for United States Weather Bureau stations, April, 1912*—Continued.

Districts and stations.	Elevation of instruments.			Pressure in inches.			Temperature of the air, in degrees Fahrenheit.											Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity, per cent.	Precipitation, inches.			Wind.					Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.	Snow on ground at end of month.
	Barometer above sea level, feet.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. ÷ 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.						Total.	Departure from normal.	Days with 0.01, or more.	Total movement, miles.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.						
Middle Slope.							**52.6**	**— 1.1**												**59**	**1.98**	**— 0.2**									**4.9**		
Denver	5,291	129	136	24.61	29.87	— .03	46.4	— 1.3	73	30	58	23	22	35	43	36	22	47	0.89	— 1.3	8	6,117	sw.	42	w.	20	9	15	6	4.9	3.6	....
Pueblo	4,685	80	86	25.17	29.85	— .03	48.8	— 1.7	81	30	62	24	7	35	48	37	25	49	1.21	— 0.2	7	6,803	se.	54	nw.	13	11	17	2	4.2	5.1	....
Concordia	1,398	42	50	28.44	29.92	— .01	54.1	+ 0.5	87	5	65	29	18	43	39	46	38	62	1.35	— 1.1	6	7,088	s.	34	sw.	13	9	10	11	5.7	.....	....
Dodge City	2,509	11	51	27.31	29.91	+ .01	52.8	— 1.6	85	5	66	27	18	40	41	44	36	61	1.73	— 0.1	6	9,684	se.	47	se.	25	12	12	6	4.6	T.	....
Wichita	1,364	139	158	28.48	29.92	— .01	54.7	— 1.9	78	30	65	32	18	45	31	48	42	68	3.87	+ 1.2	9	11,209	s.	47	s.	4	10	12	8	5.1	.....	....
Oklahoma	1,214	10	47	28.66	29.94	+ .02	58.8	— 0.8	81	30	69	35	2	49	33	51	44	67	2.81	0.0	8	12,698	s.	50	se.	20	11	14	5	4.8	.....	....
Southern Slope.							**61.2**	**— 1.2**												**52**	**1.08**	**— 0.8**									**4.2**		
Abilene	1,738	10	52	28.14	29.93	+ .03	64.4	0.0	90	30	76	39	17	53	33	53	43	55	2.30	0.0	7	9,107	s.	39	s.	27	10	5	15	5.6	.....	....
Amarillo	3,676	10	49	26.19	29.91	+ .04	54.6	0.0	89	30	68	31	2	41	39	44	33	56	0.72	— 1.0	9	10,030	sw.	45	n.	28	20	9	1	3.1	0.1	....
Del Rio	944	8	57	28.94	29.92	+ .03	69.6	— 0.4	94	30	81	37	3	58	36	.....	.....	.....	1.17	— 1.8	8	4,432	se.	42	w.	1	9	14	7	5.0	.....	....
Roswell	3,578	9	57	26.30	29.91	+ .06	56.4	— 4.2	91	30	74	28	2	39	49	42	28	46	0.15	— 0.3	4	5,844	s.	46	sw.	12	19	8	3	3.3	.....	....
Southern Plateau.							**56.0**	**— 5.0**												**43**	**0.57**	**+ 0.2**									**3.1**		
El Paso	3,762	110	133	26.13	29.87	+ .04	59.1	— 4.7	86	30	72	36	7	46	38	43	22	34	0.96	+ 0.7	3	10,006	w.	58	w.	12	22	4	4	2.5	.....	....
Santa Fe	7,013	8	56	23.17	29.90	+ .06	42.3	— 5.3	72	30	54	20	2	31	33	32	21	48	0.43	— 0.4	10	7,105	sw.	39	sw.	27	11	18	1	4.1	1.3	....
Flagstaff	6,907	8	57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Phoenix	1,108	50	56	28.76	29.91	+ .04	63.1	— 3.5	88	29	76	38	1	50	39	50	38	47	0.52	+ 0.1	3	3,645	e.	27	sw.	11	18	7	5	3.3	.....	....
Yuma	141	9	58	29.76	29.92	+ .03	65.2	— 4.9	91	29	81	39	13	50	41	51	36	42	0.10	0.0	1	4,890	w.	30	w.	11	25	5	0	0.9	.....	....
Independence	3,910	11	42	25.90	29.88	— .02	50.3	— 6.4	74	29	64	25	13	37	39	39	25	45	0.82	+ 0.7	2	7,031	s.	46	w.	28	14	10	6	4.5	T.	....
Middle Plateau.							**44.2**	**— 4.3**												**54**	**1.15**	**0.0**									**5.9**		
Reno	4,532	56	63	25.38	29.93	— .04	44.0	— 3.3	71	6	56	23	22	32	42	36	26	56	0.49	— 0.1	7	6,530	w.	36	sw.	30	7	9	14	6.2	T.	....
Tonopah	6,090	12	20	23.96	29.90	.....	41.6	.....	64	30	52	20	12	32	29	33	23	52	0.58	— 1.1	4	8,899	se.	42	w.	21	5	19	6	5.3	3.0	....
Winnemucca	4,344	18	56	25.52	29.92	— .04	44.0	— 3.1	72	7	57	20	22	31	44	36	26	57	0.70	— 0.2	7	5,633	sw.	45	sw.	29	7	3	20	7.1	0.6	....
Modena	5,479	10	43	24.52	29.89	+ .01	41.0	— 5.9	64	8	54	14	13	28	42	33	24	61	1.99	+ 1.2	9	8,506	w.	52	sw.	18	6	13	11	6.0	10.4	....
Salt Lake City	4,360	147	189	25.53	29.90	— .02	46.8	— 3.3	71	9	57	27	20	37	31	38	27	51	2.34	+ 0.1	12	5,838	se.	41	se.	10	10	5	15	5.8	4.1	....
Durango	6,546	18	56	23.55	29.88	+ .03	41.4	— 5.0	68	30	54	21	1	29	35	32	21	50	1.58	+ 0.4	10	4,598	nw.	29	w.	10	6	17	7	5.7	4.9	....
Grand Junction	4,602	43	51	25.28	29.86	— .02	48.1	— 5.1	73	24	60	27	14	36	35	38	28	52	0.30	— 0.4	7	4,546	se.	30	nw.	25	8	14	8	5.1	0.4	....
Northern Plateau.							**47.8**	**— 1.2**												**60**	**1.88**	**+ 0.5**									**6.8**		
Baker	3,466	48	53	26.35	29.94	— .06	43.4	— 0.1	71	9	54	25	6	33	36	37	30	63	1.05	+ 0.1	13	5,036	se.	29	se.	10	3	12	15	7.0	1.2	....
Boise	2,739	78	86	27.07	29.93	— .05	48.2	— 1.9	76	8	58	32	14	39	36	41	31	57	3.34	+ 2.2	13	5,053	nw.	40	se.	10	7	5	18	6.7	0.9	....
Lewiston	757	10	51	29.12	29.94	— .05	51.6	— 1.3	77	9	63	31	6	40	39	.....	.....	.....	1.66	+ 0.5	11	3,732	e.	31	w.	18	5	6	19	7.1	.....	....
Pocatello	4,477	46	54	25.37	29.90	— .04	43.2	— 3.6	69	8	53	17	20	34	36	37	31	67	2.20	+ 0.2	14	6,509	se.	36	sw.	13	5	12	13	6.3	8.0	....
Spokane	1,929	101	110	27.86	29.91	— .07	48.2	+ 0.5	74	9	58	30	6	38	36	41	34	62	0.94	— 0.4	8	4,236	sw.	22	s.	23	3	10	17	7.2	T.	....
Walla Walla	1,045	107	115	28.86	29.94	— .07	52.2	— 0.6	75	9	61	37	14	44	34	44	34	53	2.07	+ 0.4	13	5,897	sw.	33	sw.	29	9	7	14	6.2	.....	....
North Pacific Coast Region.							**47.4**	**— 1.0**												**78**	**2.67**	**— 0.6**									**7.2**		
North Head	211	11	56	29.79	30.02	— .03	46.6	— 0.9	54	1	50	41	13	44	11	45	43	88	3.19	0.0	17	12,120	nw.	56	se.	29	7	10	13	6.2	.....	....
Port Crescent	259	8	53	29.72	30.01	— .01	43.6	— 1.1	58	29	51	29	14	36	23	.....	.....	.....	1.10	— 1.4	15	3,600	nw.	17	nw.	18	1	15	14	7.0	T.	....
Seattle	205	215	250	29.88	30.01	— .02	48.0	— 1.4	64	1	54	35	5	42	21	44	40	76	1.73	— 1.0	16	5,499	s.	34	sw.	29	1	10	19	7.7	.....	....
Tacoma	213	113	120	29.78	30.01	— .02	47.9	— 1.0	64	1	55	33	5	41	25	43	38	73	2.51	— 0.2	15	3,841	sw.	23	sw.	29	2	8	20	7.9	.....	....
Tatoosh Island	109	7	57	29.89	29.98	— .02	46.8	+ 0.7	56	22	51	37	4	43	14	44	42	86	4.24	— 2.1	15	8,307	w.	47	s.	4	1	20	9	7.0	.....	....
Portland, Oreg.	153	68	106	29.84	30.00	— .06	49.9	— 1.3	72	1	58	34	14	42	30	46	41	74	2.04	— 1.0	16	4,003	sw.	24	s.	29	4	2	24	8.0	T.	....
Roseburg	510	9	57	29.46	30.02	— .05	49.0	— 1.9	76	6	59	31	14	39	41	43	38	71	3.86	+ 1.4	18	2,338	nw.	21	sw.	29	7	12	11	6.4	.....	....
Middle Pacific Coast Region.							**50.9**	**2.7**												**73**	**2.42**	**+ 0.4**									**5.4**		
Eureka	80	73	89	30.01	30.08	— .03	48.4	— 1.1	61	22	53	38	19	44	23	46	43	84	5.92	+ 2.0	18	6,113	se.	41	sw.	28	1	15	14	7.4	.....	.....
Mount Tamalpais	2,375	11	18	27.54	30.04	— .01	44.4	— 5.1	59	15	50	32	11	39	19	40	37	81	2.15	+ 0.7	12	15,329	nw.	68	nw.	18	11	7	12	5.5	.....	.....
Point Reyes Light	490	7	18	29.49	30.01	.....	49.4	+ 0.8	58	3	53	42	11	46	13	.....	.....	.....	0.71	.....	11	18,865	nw.	77	nw.	18	12	5	13	5.7	.....	.....
Red Bluff	332	50	56	29.63	29.99	— .04	54.6	— 4.5	76	8	64	37	12	45	32	47	38	59	2.63	+ 0.8	11	4,895	se.	26	nw.	18	9	10	11	5.7	.....	.....
Sacramento	69	106	117	29.94	30.02	+ .01	54.3	— 3.7	72	17	64	36	12	44	29	49	44	71	1.69	— 0.3	7	6,893	s.	34	s.	9	12	12	6	3.9	.....	.....
San Francisco	155	200	204	29.89	30.06	+ .01	52.8	— 0.9	66	14	58	44	10	48	17	47	42	72	1.38	— 0.4	11	6,388	w.	30	w.	16	11	8	11	5.4	.....	.....
San Jose	141	12	110	29.91	30.06	.....	52.2	— 4.5	71	23	63	33	22	41	33	.....	.....	.....	1.95	+ 0.5	9	2,888	nw.	13	s.	10	12	10	8	4.9	.....	.....
Southeast Farallon	30	9	17	30.04	30.07	.....	50.6	.....	59	14	53	43	11	48	9	.....	.....	.....	1.24	— 0.6	9	12,376	nw.	53	nw.	19	14	8	8	4.3	.....	.....
South Pacific Coast Region.							**55.2**	**— 2.8**												**73**	**1.98**	**+ 1.0**									**4.8**		
Fresno	330	62	70	29.66	30.03	+ .04	56.8	— 4.4	77	6	68	37	13	45	35	48	39	60	1.86	+ 1.2	10	4,704	nw.	26	sw.	10	13	10	7	4.4	.....	.....
Los Angeles	338	159	191	29.65	30.02	+ .03	56.4	— 1.2	76	23	64	44	11	49	24	50	45	72	1.66	+ 0.5	7	4,823	ne.	30	sw.	19	10	11	9	5.4	.....	.....
San Diego	87	94	102	29.94	30.03	— .04	56.1	— 2.1	67	23	61	45	13	51	17	52	49	80	2.13	+ 1.4	8	5,081	nw.	26	w.	12	16	8	6	3.9	.....	.....
San Luis Obispo	201	47	54	29.87	30.09	+ .04	51.5	— 3.7	67	23	60	34	13	43	26	47	44	79	2.27	+ 0.8	7	4,518	nw.	24	w.	26	9	10	11	5.5	.....	.....
West Indies.																																	
San Juan	82	48	90	29.94	30.03	+ .05	76.8	.....	85	3	82	68	6	72	14	.....	.....	.....	6.32	+ 2.5	12	7,437	e.	30	e.	24	15	12	3	4.1	.....	.....
Panama.																																	
Ancon	92	6	69	29.77	29.86	.....	82.1	.....	97	7	92	69	2	72	26	74	72	78	2.68	— 0.1	5	6,390	nw.	25	n.	5	8	16	6	5.1	.....	.....
Culebra	404	5	62	29.46	29.87	.....	81.4	.....	96	17	91	67	2	72	27	73	70	79	3.14	— 0.7	4	7,059	nw.	30	n.	25	6	21	3	4.9	.....	.....
Colon	10	5	71	29.89	29.90	.....	82.8	.....	90	20	88	74	18	78	15	75	73	78	0.75	— 3.3	6	10,620	n.	33	ne.	24	16	12	2	3.7	.....	.....

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes, or 0.80 in 1 hour, during April, 1912, at all stations furnished with self-registering gages.*

Stations.	Date.	Total duration.		Total amount of precipitation.	Excessive rate.		Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Abilene, Tex.	16	6.05 a. m.	8.50 a. m.	0.56	6.13 a. m.	6.26 a. m.	0.02	0.21	0.41	0.47											
	19	5.42 p. m.	6.25 p. m.	0.85	5.44 p. m.	6.00 p. m.	0.02	0.10	0.39	0.73	0.77										
Albany, N. Y.	7			0.59														0.24			
Alpena, Mich.	14			1.04														0.64			
Amarillo, Tex.	5			0.19														0.19			
Anniston, Ala.	15	1.10 p. m.	2.55 p. m.	0.51	2.08 p. m.	2.24 p. m.	0.01	0.12	0.32	0.42	0.47										
	22	D. N. a. m.	7.45 a. m.	1.26	5.27 a. m.	5.46 a. m.	0.05	0.15	0.37	0.75	0.89										
Asheville, N. C.	27			0.98														0.51			
Atlanta, Ga.	15	3.35 p. m.	7.20 p. m.	1.45	4.23 p. m.	4.54 p. m.	0.04	0.10	0.28	0.41	0.57	0.79	0.95								
	16–17	4.25 p. m.	D. N a. m.	1.29	5.30 p. m.	5.53 p. m.	0.13	0.16	0.40	0.55	0.78	0.85									
	22	D. N. a. m.	8.53 a. m.	1.51	6.41 a. m.	7.13 a. m.	0.07	0.31	0.58	0.80	0.87	0.93	1.02	1.07							
Atlantic City, N. J.	18			0.43														0.39			
Augusta, Ga.	22	9.55 a. m.	12.45 p. m.	0.58	10.57 a. m.	11.06 a. m.	0.04	0.28	0.32												
Baker, Oreg.	29			0.10														0.06			
Baltimore, Md.	2			0.32														0.28			
Bentonville, Ark.	28	3.20 a. m.	8.40 a. m.	2.58	3.45 a. m.	4.38 a. m.	0.04	0.19	0.50	0.62	0.71	0.75	0.78	0.88	1.03	1.13	1.29	1.40			
					6.30 a. m.	6.44 a. m.	1.59	0.12	0.55	0.66											
Binghamton, N. Y.	15			0.49														0.21			
Birmingham, Ala.	16	11.35 a. m.	5.30 p. m.	2.04	2.36 p. m.	3.49 p. m.	0.55	0.07	0.15	0.23	0.30	0.40	0.52	0.62	0.68	0.72	0.74	0.80	1.42		
	22	4.10 a. m.	6.30 a. m.	0.94	4.22 a. m.	4.36 a. m.	0.02	0.16	0.54	0.68											
	27	7.08 a. m.	3.50 p. m.	1.72	7.20 a. m.	8.15 a. m.	0.01	0.09	8.33	0.38	0.40	0.41	0.42	0.51	0.67	0.69	0.71	0.85			
Bismarck, N. Dak.	11	12.09 p. m.	1.57 p. m.	1.13	1.22 p. m.	1.39 p. m.	0.17	0.22	0.48	0.68	0.72										
Block Island, R. I.	17			0.81														0.24			
Boise, Idaho.	12–13			1.26														(*)			
Boston, Mass.	7			0.37														0.18			
Buffalo, N. Y.	14			0.63†														0.30			
Burlington, Vt.	7			0.61														0.28			
Cairo, Ill.	28			1.66														0.36			
Canton, N. Y.	7			0.47														0.13			
Charles City, Iowa.	13			0.78														0.76			
Charleston, S. C.	20			1.32														0.48			
Charlotte, N. C.	22	5.55 a. m.	11.48 a. m.	1.96	7.51 a. m.	8.34 a. m.	0.30	0.12	0.20	0.28	0.36	0.43	0.54	0.69	0.83	0.87					
Chattanooga, Tenn.	1	12.55 a. m.	9.10 a. m.	0.75	6.28 a. m.	6.46 a. m.	0.24	0.06	0.24	0.36	0.40										
	16	3.42 p. m.	11.02 p. m.	2.18	5.04 p. m.	5.18 p. m.	0.23	0.18	0.38	0.44											
	21–22	11.16 p. m.	7.47 a. m.	1.58	4.06 a. m.	4.32 a. m.	0.32	0.24	0.38	0.43	0.46	0.56	0.58								
	27	2.51 a. m.	10.50 a. m.	2.15	3.59 a. m.	4.58 a. m.	0.07	0.07	0.19	0.33	0.51	0.62	0.74	0.89	0.97	1.05	1.10	1.23			
	29	3.35 a. m.	9.10 a. m.	1.36	4.44 a. m.	5.18 a. m.	0.05	0.10	0.40	0.53	0.67	0.80	1.07	1.15							
Cheyenne, Wyo.	20			1.28														(*)			
Chicago, Ill.	28			1.02														0.29			
Cincinnati, Ohio.	14	10.30 p. m.	11.05 p. m.	0.43	10.34 p. m.	10.52 p. m.	0.01	0.05	0.14	0.32	0.42										
	16–17	10.25 p. m.	1.40 p. m.	0.97	1.04 p. m.	1.22 p. m.	0.55	0.05	0.20	0.36	0.40										
Cleveland, Ohio.	14			0.84														0.26			
Columbia, Mo.	25–26	9.48 p. m.	D. N. a. m.	0.66	10.27 p. m.	10.37 p. m.	0.10	0.19	0.38												
	27–28	11.45 p. m.	6.40 a. m.	2.33	5.26 a. m.	6.21 a. m.	1.39	0.08	0.17	0.22	0.26	0.30	0.38	0.43	0.51	0.59	0.76	0.94			
Columbia, S. C.	22			0.44														0.37			
Columbus, Ohio.	26			0.94														0.30			
Concord, N. H.	2–3			0.88														(*)			
Concordia, Kans.	27			0.38														0.21			
Corpus Christi, Tex.	8			0.61														0.29			
Davenport, Iowa.	17–18			1.17														(*)			
Dayton, Ohio.	17			1.17														0.29			
Del Rio, Tex.	7			0.87														0.26			
Denver, Colo.	26			0.10														0.10			
Des Moines, Iowa.	20–21			1.25														0.74			
Detroit, Mich.	21			0.38														0.37			
Devils Lake, N. Dak.	30			0.86														0.25			
Dodge City, Kans.	17–18			1.54														(*)			
Dubuque, Iowa.	13			0.68														0.55			
Duluth, Minn.	25			0.78														0.32			
Durango, Colo.	12–13			0.39														(*)			
Eastport, Me.	23			0.78														0.14			
Elkins, W. Va.	17–18	8.01 p. m.	D. N. a. m.	0.80	8.34 p. m.	8.49 p. m.	0.05	0.21	0.27	0.35											
El Paso, Tex.	7			0.88														0.17			
Erie, Pa.	28–29			0.99														(*)			
Escanaba, Mich.	21			0.83														0.20			
Eureka, Cal.	28			1.25														0.39			
Evansville, Ind.	17	7.26 a. m.	10.45 a. m.	0.77	7.32 a. m.	7.46 a. m.	0.02	0.17	0.38	0.42											
	26	12.10 p. m.	7.10 p. m.	0.68	3.09 p. m.	3.39 p. m.	0.06	0.11	0.22	0.33	0.44	0.47									
Flagstaff, Ariz.																					
Fort Smith, Ark.	1			0.84														0.30			
Fort Wayne, Ind.	17			0.36														0.23			
Fort Worth, Tex.	1	2.12 a. m.	6.44 a. m.	1.08	5.36 a. m.	6.11 a. m.	0.25	0.13	0.26	0.32	0.49	0.60	0.67	0.77							
Fresno, Cal.	9			0.62														0.23			
Galveston, Tex.	16	11.10 a. m.	2.15 p. m.	1.40	11.26 a. m.	12.05 p. m.	0.06	0.08	0.22	0.44	0.63	0.76	0.88	1.13	1.22						
Grand Haven, Mich.	14			0.49														0.33			
Grand Junction, Colo.	17			0.19														0.06			
Grand Rapids, Mich.	21			0.26														0.21			
Green Bay, Wis.	21			0.75														0.41			
Hannibal, Mo.	12	9.59 a. m.	11.08 a. m.	0.46	10.37 a. m.	10.46 a. m.	0.11	0.24	0.33												
Harrisburg, Pa.	17–18			1.16														0.39			
Hartford, Conn.	29			1.07														0.19			
Hatteras, N. C.	30	1.10 a. m.	5.55 a. m.	0.89	1.19 a. m.	1.33 a. m.	0.03	0.17	0.32	0.39											
Havre, Mont.	13			0.89														(*)			
Helena, Mont.	24–25			0.41														(*)			
Houghton, Mich.	21			0.70														(*)			
Houston, Tex.	16	D. N. a. m.	1.15 p. m.	4.70	7.00 a. m.	7.46 a. m.	0.16	0.37	0.57	0.58	0.64	0.68	0.69	0.74	0.93	1.24	1.27				
					9.34 a. m.	11.18 a. m.	1.70	0.15	0.37	0.66	0.92	1.04	1.15	1.23	1.26	1.34	1.35	1.58	2.01	2.61	2.82
Huron, S. Dak.	25			0.93														(*)			
Independence, Cal.	9			0.80														0.49			
Indianapolis, Ind.	17			0.73														0.46			
Iola, Kans.	28–29	8.26 p. m.	1.25 a. m.	1.12	8.42 p. m.	9.18 p. m.	0.01	0.17	0.32	0.42	0.57	0.72	0.77	0.83							
Jacksonville, Fla.	30	D. N. a. m.	11.04 a. m.	2.39	6.29 a. m.	7.00 a. m.	0.05	0.09	0.18	0.24	0.35	0.47	0.60	0.63							
	30				9.55 a. m.	10.08 a. m.	1.41	0.27	0.49	0.66											
Kalispell, Mont.	10			0.34														0.18			
Kansas City, Mo.	28			0.54														0.17			
Keokuk, Iowa.	17–18			0.93														(*)			
Key West, Fla.	3			0.17														0.17			
Knoxville, Tenn.	27	D. N. a. m.	8.30 a. m.	1.91	2.49 a. m.	3.25 a. m.	0.14	0.08	0.16	0.27	0.36	0.42	0.53	0.61	0.66						
La Crosse, Wis.	13–14	9.40 p. m.	D. N. a. m.	1.10	10.30 p. m.	11.11 p. m.	0.14	0.07	0.11	0.23	0.29	0.35	0.47	0.55	0.61	0.65					
Lander, Wyo.	20–21			0.85†														(*)			
Lansing, Mich.	28–29			1.03														(*)			

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes, or 0.80 in 1 hour, during April, 1912, at all stations furnished with self-registering gages*—Continued.

Stations.	Date.	Total duration.		Total amount of precipitation.	Excessive rate.		Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated.												
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
La Salle, Ill.	28			1.20														0.23			
Lewiston, Idaho	3			0.26														0.15			
Lexington, Ky.	20	11.25 a. m.	8.00 p. m.	1.93	3.32 p. m.	4.12 p. m.	0.38	0.05	0.17	0.23	0.33	0.40	0.48	0.58	0.64						
	26	4.35 p. m.	7.05 p. m.	1.01	5.15 p. m.	5.50 p. m.	0.10	0.10	0.23	0.37	0.49	0.54	0.63	0.68							
Lincoln, Nebr.					6.53 p. m.	7.07 p. m.	1.51	0.13	0.26	0.38											
Little Rock, Ark.	1	3.45 p. m.	6.35 p. m.	0.72	5.17 p. m.	5.29 p. m.	0.05	0.24	0.40	0.47											
	16	6.40 a. m.	9.50 a. m.	1.28	7.52 a. m.	8.20 a. m.	0.23	0.15	0.37	0.59	0.82	0.95	1.00								
	21	6.25 p. m.	D. N. p. m.	2.25	6.57 p. m.	8.18 p. m.	0.02	0.10	0.19	0.40	0.57	0.70	0.89	0.97	0.98	0.99	1.01	1.49	2.08	2.16	
	28	11.30 a. m.	2.50 p. m.	0.98	12.45 p. m.	12.52 p. m.	0.38	0.44	0.49												
Los Angeles, Cal.	10			0.48														0.13			
Louisville, Ky.	17	10.55 a. m.	12.25 p. m.	0.71	11.12 a. m.	11.22 a. m.	0.01	0.30	0.57												
	21–22	D. N. p. m.	D. N. a. m.	0.74	12.48 a. m.	12.57 a. m.	0.01	0.17	0.34												
	26	1.57 p. m.	6.45 p. m.	1.96	3.10 p. m.	4.16 p. m.	0.04	0.14	0.22	0.37	0.43	0.54	0.61	0.64	0.69	0.80	1.02	1.25	1.42		
Lynchburg, Va.	27			0.58														0.25			
Macon, Ga.	15–16	8.47 p. m.	D. N. a. m.	1.20	10.47 p. m.	11.07 p. m.	0.48	0.15	0.36	0.51	0.62										
	16–17	4.54 p. m.	11.25 p. m.	1.26	11.25 p. m.	12.12 a. m.	0.41	0.06	0.11	0.16	0.22	0.36	0.52	0.65	0.70	0.75	0.79				
	22	8.17 a. m.	10.45 a. m.	1.17	8.41 a. m.	9.24 a. m.	0.01	0.05	0.17	0.42	0.49	0.62	0.77	0.90							
Madison, Wis.	25–26			0.28														0.20			
Marquette, Mich.	21–22			1.27														(*)			
Memphis, Tenn.	26–27	8.32 p. m.	D. N. a. m.	1.84	12.27 a. m.	12.51 a. m.	0.51	0.07	0.19	0.43	0.64	0.80									
Meridian, Miss.	16	10.13 a. m.	6.45 p. m.	1.09	3.12 p. m.	3.29 p. m.	0.17	0.08	0.34	0.43	0.49										
	20	2.30 a. m.	8.05 a. m.	1.43	4.35 a. m.	5.28 a. m.	0.57	0.07	0.14	0.17	0.23	0.29	0.45	0.57	0.64	0.72	0.77	0.80			
	29	3.30 a. m.	4.45 a. m.	0.99	3.35 a. m.	4.26 a. m.	0.01	0.06	0.10	0.11	0.22	0.26	0.32	0.41	0.59	0.82	0.93	0.97			
Miami, Fla.	3	2.58 p. m.	3.50 p. m.	0.67	3.18 p. m.	3.39 p. m.	0.04	0.16	0.29	0.48	0.60	0.62									
	11	7.58 p. m.	8.30 p. m.	0.50	8.00 p. m.	8.21 p. m.	0.01	0.18	0.30	0.39	0.46	0.49									
	12	11.30 a. m.	12.10 p. m.	1.18	11.32 a. m.	11.54 a. m.	0.01	0.23	0.59	0.94	1.13	1.16									
	24–25	D. N. p. m.	D. N. a. m.	0.73	11.58 p. m.	12.16 a. m.	0.01	0.14	0.38	0.62	0.71										
	25	7.20 a. m.	10.05 a. m.	1.18	8.02 a. m.	8.30 a. m.	0.13	0.15	0.37	0.54	0.72	0.83	0.90								
Milwaukee, Wis.	14			0.45														0.31			
Minneapolis, Minn.	13			0.54														0.28			
Mobile, Ala.	15–16	2.33 p. m.	D. N. a. m.	3.27	9.02 p. m.	9.52 p. m.	0.49	0.18	0.34	0.45	0.50	0.54	0.61	0.77	0.97	1.13	1.18				
					9.52 p. m.	10.42 p. m.		1.23	1.38	1.46	1.49	1.59	1.66	1.69	1.73	1.77	1.81				
					10.42 p. m.	11.06 p. m.		1.91	2.01	2.09	2.22	2.28									
	17	D. N. a. m.	9.50 a. m.	2.12	6.01 a. m.	7.14 a. m.	0.33	0.12	0.17	0.28	0.54	0.64	0.70	0.88	1.16	1.19	1.27	1.44	1.77		
	20	5.50 p. m.	D. N. p. m.	2.50	9.15 p. m.	9.32 p. m.	1.48	0.13	0.43	0.88	0.94										
	21	D. N. a. m.	D. N. a. m.	2.14	2.37 a. m.	3.17 a. m.	0.16	0.28	0.76	1.07	1.09	1.12	1.19	1.25	1.36						
Modena, Utah	11–12			0.60														(*)			
Montgomery, Ala.	12	3.58 p. m.	4.45 p. m.	0.71	4.20 p. m.	4.41 p. m.	0.01	0.07	0.29	0.43	0.69	0.70									
	14	4.05 p. m.	6.35 p. m.	2.36	4.17 p. m.	5.25 p. m.	0.06	0.06	0.14	0.19	0.26	0.33	0.44	0.75	1.05	1.35	1.59	1.94	2.27		
	14	7.15 p. m.	9.05 p. m.	1.50	7.22 p. m.	7.58 p. m.	0.03	0.09	0.32	0.70	0.96	1.15	1.29	1.40	1.44						
	16–17	4.15 p. m.	4.45 a. m.	3.93	6.33 p. m.	6.53 p. m.	0.37	0.20	0.47	0.95	1.32										
	20	1.15 a. m.	8.40 a. m.	3.25	5.06 a. m.	5.50 a. m.	0.56	0.09	0.24	0.49	0.66	0.74	0.80	0.86	0.92	1.02					
	20				6.27 a. m.	8.19 a. m.	1.71	0.07	0.08	0.13	0.18	0.30	0.34	0.44	0.59	0.67	0.70	0.77	1.05	1.30	1.54
	22	7.04 a. m.	7.55 a. m.	1.00	7.28 a. m.	7.48 a. m.	0.02	0.15	0.43	0.75	0.97										
	29	7.35 a. m.	10.15 a. m.	0.80	9.41 a. m.	10.03 a. m.	0.09	0.12	0.22	0.38	0.63	0.71									
Moorhead, Minn.	13			1.38														(*)			
Mount Tamalpais, Cal.	29			0.47														0.31			
Mount Weather, Va.	7			0.45														(*)			
Nantucket, Mass.	17–18			0.80														0.28			
Nashville, Tenn.	1	4.30 a. m.	3.38 p. m.	1.47	8.40 a. m.	8.55 a. m.	0.28	0.26	0.40	0.48											
	1–2	8.15 p. m.	3.30 a. m.	2.20	10.21 p. m.	10.36 p. m.	0.11	0.22	0.41	0.52											
					1.45 a. m.	2.17 a. m.	1.22	0.15	0.29	0.35	0.46	0.63	0.87	0.93							
	22	12.20 a. m.	1.30 a. m.	0.84	12.38 a. m.	12.58 a. m.	0.03	0.07	0.15	0.57	0.77										
	26–27	9.20 p. m.	6.00 a. m.	3.36	11.50 p. m.	12.43 a. m.	0.30	0.27	0.56	0.91	1.27	1.48	1.64	1.78	1.86	1.93	2.00	2.09			
	28–29	8.25 p. m.	4.00 a. m.	1.97	11.05 p. m.	11.43 p. m.	0.71	0.05	0.18	0.24	0.35	0.44	0.58	0.64	0.70						
New Haven, Conn.	7			0.62														0.26			
New Orleans, La.	12–13	7.50 p. m.	8.15 a. m.	1.50	8.03 p. m.	8.27 p. m.	0.02	0.07	0.12	0.25	0.40	0.55									
	29	7.10 a. m.	9.50 a. m.	1.20	7.12 a. m.	7.40 a. m.	0.01	0.08	0.16	0.27	0.54	0.69	0.79								
New York, N. Y.	2			0.37														0.24			
Norfolk, Va.	29	3.35 p. m.	8.10 p. m.	0.71	3.37 p. m.	3.41 p. m.	0.01	0.25													
Northfield, Vt.	18–19			0.30														(*)			
North Head, Wash.	4			0.26														0.21			
North Platte, Nebr.	20			1.00														0.38			
Oklahoma, Okla.	12	12.10 a. m	1.25 a. m.	0.59	12.13 a. m.	12.30 a. m.	0.01	0.19	0.34	0.43	0.48										
	27–28	11.45 p. m.	4.40 a. m.	1.00	2.24 a. m.	2.50 a. m.	0.09	0.12	0.21	0.35	0.44	0.52	0.56								
Omaha, Nebr.	20			0.66														0.18			
Oswego, N. Y.	7–8			0.70														(*)			
Palestine, Tex.	7	12.30 a. m.	D. N. a. m.	1.05	1.03 a. m.	1.38 a. m.	0.08	0.21	0.37	0.50	0.57	0.61	0.66	0.71							
	19	4.46 p. m.	6.33 p. m.	0.59	5.19 p. m.	5.33 p. m.	0.01	0.14	0.34	0.52											
	19–20	7.40 p. m.	2.12 a. m.	1.26	10.11 p. m.	10.32 p. m.	0.33	0.08	0.24	0.37	0.61	0.64									
Parkersburg, W. Va.	17	4.55 p. m.	9.50 p. m.	0.80	5.24 p. m.	5.34 p. m.	0.03	0.15	0.40												
					11.02 p. m.	11.12 p. m.	0.01	0.26	0.72												
Pensacola, Fla.	19–20	9.45 p. m.	1.30 a. m.	0.80	7.39 p. m.	8.07 p. m.	0.84	0.12	0.53	1.13	1.58	1.88	2.01								
	20–21	5.40 p. m.	7.35 a. m.	4.45	6.53 a. m.	7.07 a. m.	3.83	0.09	0.33	0.58											
Peoria, Ill.	12	12.24 p. m.	3.53 p. m.	1.79	1.03 p. m.	1.43 p. m.	0.02	0.06	0.32	0.66	0.88	1.01	1.11	1.30	1.50						
Philadelphia, Pa.	13			0.47														0.33			
Phoenix, Ariz.	11			0.26														0.10			
Pierre, S. Dak.	27			0.44														0.20			
Pittsburgh, Pa.	12			0.45														(*)			
Pocatello, Idaho	19			0.48														(*)			
Point Reyes Light, Cal.	28			0.22														0.08			
Port Huron, Mich.	12			0.74														0.33			
Portland, Me.	16			0.52														0.52			
Portland, Oreg.	3			0.48														0.10			
Providence, R. I.	2			0.64														0.29			
Pueblo, Colo.	16			0.44														0.42			
Raleigh, N. C.	22	9.00 a. m.	2.50 p. m.	1.92	9.30 a. m.	10.00 a. m.	0.04	0.14	0.24	0.25	0.29	0.52	0.63								
					11.50 a. m.	12.48 p. m.	0.85	0.05	0.13	0.16	0.21	0.25	0.38	0.42	0.45	0.52	0.68	0.99			
Rapid City, S. Dak.	13			0.93†														0.21			
Red Bluff, Cal.	9			0.61														0.30			
Reno, Nev.	29			0.27														0.08			
Richmond, Va.	18	3.42 p. m.	4.10 p. m.	0.54	3.42 p. m.	3.58 p. m.	0.00	0.13	0.33	0.52	0.54										
Rochester, N. Y.	22			0.57														0.32			
Roseburg, Oreg.	30			0.99														0.26			
Roswell, N. Mex.	5			0.11														0.09			
Sacramento, Cal.	10			0.40														0.19			
St. Joseph, Mo.	1			0.51														0.38			
St. Louis, Mo.	12	11.53 a. m.	11.30 p. m.	1.46	11.58 a. m.	12.19 p. m.	0.01	0.10	0.22	0.36	0.51	0.55									
	28	8.05 a. m.	10.50 a. m.	0.77	8.27 a. m.	8.34 a. m.	0.01	0.32	0.44												

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes, or 0.80 in 1 hour, during April, 1912, at all stations furnished with self-registering gages*—Continued.

Stations.	Date.	Total duration. From—	Total duration. To—	Total amount of precipitation.	Excessive rate. Began—	Excessive rate. Ended—	Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated. 5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
St. Paul, Minn.	21			1.14														0.34			
Salt Lake City, Utah	18			0.63														(*)			
San Antonio, Tex.	7			1.35														0.45			
San Diego, Cal.	9			0.82														0.17			
Sand Key, Fla.	26			0.15														0.15			
Sandusky, Ohio	17			0.48														0.31			
San Francisco, Cal.	10			0.64														0.15			
San Jose, Cal.	11			0.38														0.14			
San Luis Obispo, Cal.	10			1.22														0.29			
Santa Fe, N. Mex.	17–18			0.13														(*)			
Sault Ste. Marie, Mich.	26			0.89														(*)			
Savannah, Ga.	2	4.02 p. m.	5.17 p. m.	0.69	4.45 p. m.	4.59 p. m.	0.12	0.31	0.41	0.56											
	22	1.21 p. m.	3.52 p. m.	1.38	1.23 p. m.	2.12 p. m.	0.01	0.23	0.39	0.50	0.62	0.72	0.84	0.90	1.03	1.19	1.23				
Scranton, Pa.	2			0.67														0.33			
Seattle, Wash.	4			0.12														0.09			
Sheridan, Wyo.	20			0.35														0.12			
Shreveport, La.	16	11.15 a. m.	1.10 p. m.	1.03	11.57 a. m.	12.22 p. m.	0.09	0.16	0.42	0.57	0.68	0.79									
	28	2.45 p. m.	5.00 p. m.	1.94	4.10 p. m.	4.48 p. m.	0.48	0.10	0.28	0.30	0.69	0.91	1.20	1.40	1.44						
Sioux City, Iowa	20			0.88														0.33			
Southeast Farallon, Cal.	28			0.30														0.11			
Spokane, Wash.	28			0.22														0.19			
Springfield, Ill.	28			1.33														0.51			
Springfield, Mo.	25–26	11.55 p. m.	D. N. a. m.	0.75	12.07 a. m.	12.28 a. m.	0.10	0.09	0.18	0.36	0.61	0.65									
	27–28	10.07 p. m.	D. N. a. m.	0.81	11.47 p. m.	12.15 a. m.	0.18	0.05	0.10	0.18	0.30	0.49	0.53								
	28	D. N. a. m.	9.50 a. m.	1.17	4.05 a. m.	4.11 a. m.	0.08	0.45	0.52												
Syracuse, N. Y.	1–2			0.68														(*)			
Tacoma, Wash.	29			0.36														0.13			
Tampa, Fla.	18	8.50 a. m.	10.45 a. m.	0.74	9.03 a. m.	9.17 a. m.	0.01	0.22	0.50	0.60											
Tatoosh Island, Wash.	3			0.44														0.18			
Taylor, Tex.	28	7.00 a. m.	7.45 a. m.	0.40	7.06 a. m.	7.18 a. m.	0.02	0.22	0.31	0.37											
Thomasville, Ga.	2	12.25 p. m.	5.35 p. m.	0.90	12.41 p. m.	1.19 p. m.	0.01	0.14	0.37	0.43	0.45	0.47	0.54	0.67	0.71						
	17	11.06 a. m.	1.32 p. m.	1.16	12.06 p. m.	12.44 p. m.	0.01	0.10	0.28	0.52	0.72	0.85	0.94	1.00	1.05						
	20–21	10.55 a. m.	4.40 a. m.	2.83	12.15 p. m.	12.50 p. m.	0.06	0.10	0.14	0.21	0.34	0.61	0.67	0.73							
	21	6.34 a. m.	10.42 a. m.	1.83	7.42 a. m.	8.34 a. m.	0.15	0.13	0.31	0.40	0.51	0.76	0.92	1.03	1.09	1.18	1.27	1.33			
Titusville, Fla.	13			1.23														(*)			
Toledo, Ohio	21			0.31														0.31			
Tonopah, Nev.	9			0.22														(*)			
Topeka, Kans.	20			0.32														0.32			
Valentine, Nebr.	20			1.29														0.19			
Vicksburg, Miss.	12	6.02 a. m.	10.35 a. m.	2.23	6.59 a. m.	8.00 a. m.	0.07	0.08	0.23	0.31	0.36	0.40	0.51	0.59	0.70	0.75	0.83	1.05	1.26		
	28	2.20 p. m.	4.40 p. m.	1.65	3.38 p. m.	4.08 p. m.	0.89	0.09	0.18	0.23	0.32	0.59	0.71								
Walla Walla, Wash.	29			0.30														0.19			
Washington, D. C.	2	6.24 p. m.	7.15 p. m.	0.52	6.40 p. m.	6.59 p. m.	0.01	0.17	0.24	0.40	0.50										
Wichita, Kans.	28			2.10														0.70			
Williston, N. Dak.	13–14			0.95														(*)			
Wilmington, N. C.	30			0.42														0.41			
Winnemucca, Nev.	10			0.39														(*)			
Wytheville, Va.	22			0.66														0.25			
Yankton, S. Dak.	13			0.70														0.42			
Yellowstone Park, Wyo.	12–13			0.52														(*)			

* Self-register not working. † Record incomplete. ‡ No precipitation occurred during month.

TABLE III.—*Data furnished by the Canadian Meteorological Service, April, 1912.*

Districts and stations.	Pressure.			Temperature.						Precipitation.		
	Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max. +mean min.÷2.	Departure from normal.	Mean maximum.	Mean minimum.	Highest.	Lowest.	Total.	Departure from normal.	Total snowfall.
	Ins.	*Ins.*	*Ins.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	*Ins.*	*Ins.*	*Ins.*
St. Johns, N. F.	29.71	29.85	−0.04	31.9	−2.6	38.9	25.0	49	13	3.15	−1.01	5.0
Sydney, C. B. I.	29.88	29.92	− .03	35.8	+0.8	44.0	27.5	60	14	2.16	−1.69	4.0
Halifax, N. S.	29.82	29.93	− .03	39.1	+1.3	47.1	31.0	67	20	3.87	−0.31	3.2
Grand Manan, N. B.	29.88	29.93	− .01	40.0	+0.8	47.8	32.2	59	17	3.06	+0.10	4.0
Yarmouth, N. S.	29.87	29.94	− .02	39.5	+0.6	46.4	32.6	55	20	3.48	+0.09	9.9
Charlottetown, P. E. I.	29.86	29.90	.00	35.6	+0.4	43.0	28.2	56	12	3.44	+0.79	9.2
Chatham, N. B.	29.88	29.90	.00	35.4	−0.1	45.5	25.4	64	10	3.22	+0.59	15.3
Father Point, Que.	29.83	29.85	− .08	32.2	−1.0	39.5	24.9	58	13	3.48	+1.90	3.4
Quebec, Que.	29.58	29.92	− .07	34.6	−0.5	43.7	25.5	63	6	3.13	+1.04	3.1
Montreal, Que.	29.72	29.93	− .07	39.5	−0.2	48.1	30.9	64	14	3.09	+0.85	1.5
Stonecliffe, Que.	29.30	29.92	− .10	35.8	−2.1	49.5	22.0	69	− 7	3.10	+1.54	8.2
Ottawa, Ont.	29.68	30.01	− .01	38.8	−1.2	48.4	29.1	66	9	3.14	+1.64	1.3
Kingston, Ont.	29.67	29.99	− .03	38.6	−1.4	47.1	30.2	64	17	3.27	+1.48	6.3
Toronto, Ont.	29.59	29.98	− .04	41.8	+1.0	50.0	33.5	71	19	2.47	+0.10	4.2
White River, Ont.	28.59	29.94	− .10	30.3	−2.7	43.3	17.3	62	−16	4.22	+2.97	14.0
Port Stanley, Ont.	29.31	29.97	− .05	42.6	+1.6	50.9	34.3	62	20	3.55	+1.08	0.0
Southampton, Ont.	29.25			40.2	+1.5	49.5	30.8	71	15	2.10	+0.30	2.6
Parry Sound, Ont.	29.26	29.96	− .06	38.2	+0.6	49.2	27.2	68	7	2.34	+0.43	1.5
Port Arthur, Ont.	29.24	29.97	− .06	34.4	+0.9	43.9	25.0	56	10	2.50	+0.78	3.5
Winnipeg, Man.	29.12	29.96	− .06	41.2	+5.3	52.4	30.0	75	18	2.25	+1.20	5.8
Minnedosa, Man.	28.10	29.94	− .07	39.2	+3.2	51.0	27.4	67	14	1.26	+0.20	3.0
Qu'Appelle, Sask.	27.63	29.89	− .10	40.4	+3.0	52.1	28.7	68	17	1.29	+0.24	7.6
Medicine Hat, Alberta												
Swift Current, Sask.	27.31	29.89	− .07	44.2	+2.9	56.8	31.5	70	20	0.42	−0.51	0.2
Calgary, Alberta	26.28	29.83	− .07	41.2	+1.6	53.5	29.0	65	14	2.05	+1.41	4.7
Banff, Alberta	25.25	29.85	− .05	39.2	+3.9	49.3	29.0	59	17	1.35	+0.27	8.4
Edmonton, Alberta	27.57	29.87	− .02	43.8	+3.9	56.8	30.8	69	23	1.57	+0.69	2.7
Prince Albert, Alberta												
Battleford, Sask.	28.14	29.88	− .09	43.0	+5.8	56.1	29.9	70	20	0.03	−0.44	0.0
Kamloops, B. C.	28.54	29.81	− .12	49.0	+0.1	59.7	38.3	68	26	1.36	+0.97	0.0
Victoria, B. C.	29.88	29.98	− .03	48.6	+1.8	55.8	41.4	62	30	1.30	−1.07	0.0
Barkerville, B. C.	25.51	29.81	− .05	36.4	+3.3	44.4	28.5	54	14	2.25	+0.43	14.5
Dawson, Yukon												
Hamilton, Bermuda	30.06	30.23	+ .18	64.6	+0.7	69.9	59.3	76	49	3.28	−0.90	0.0

Climatological Districts of the United States.

106 Climatological Sections of the United States.

Chart I. Hydrographs of Several Principal Rivers, April, 1912.

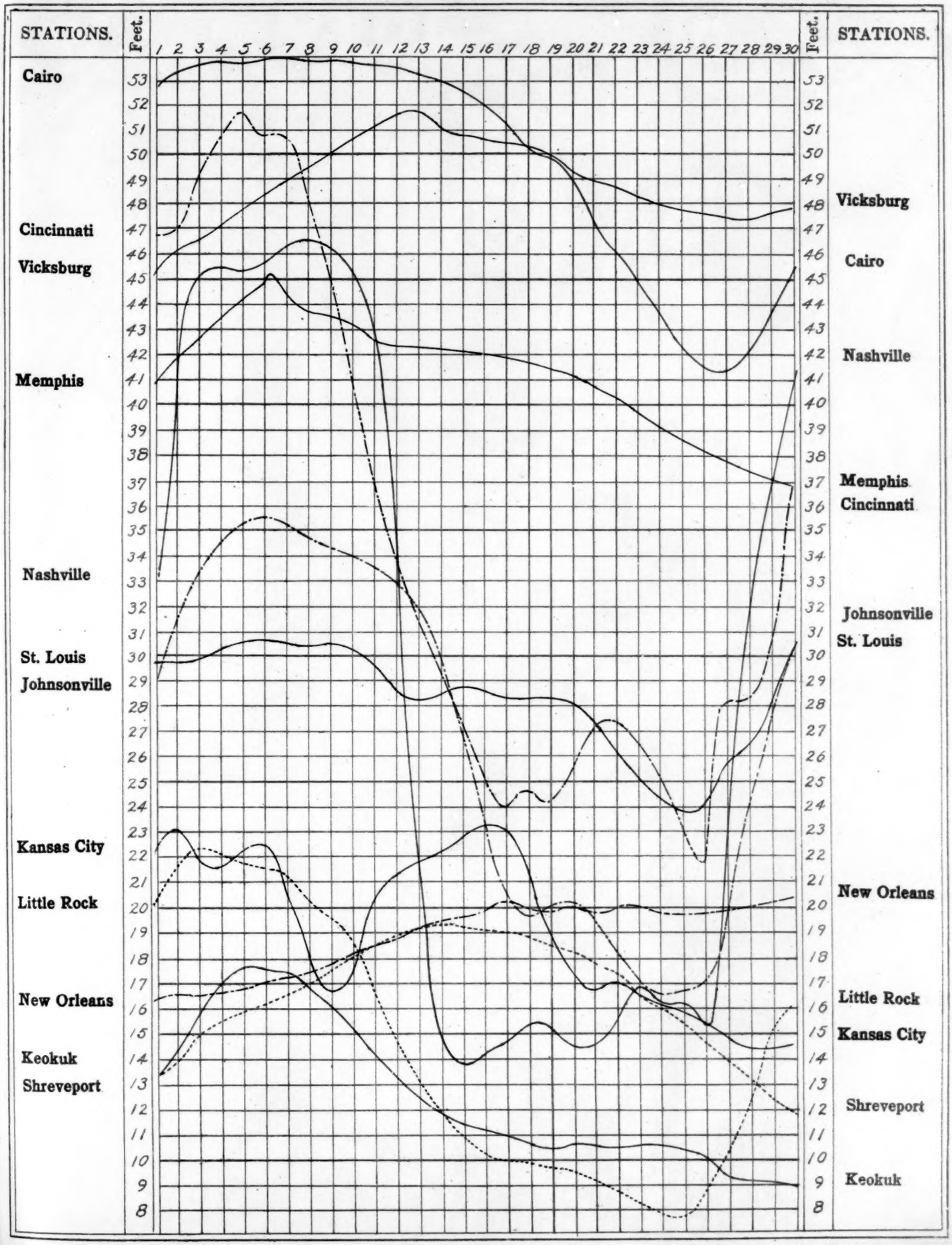


Chart II. Tracks of Centers of High Areas, April, 1912.

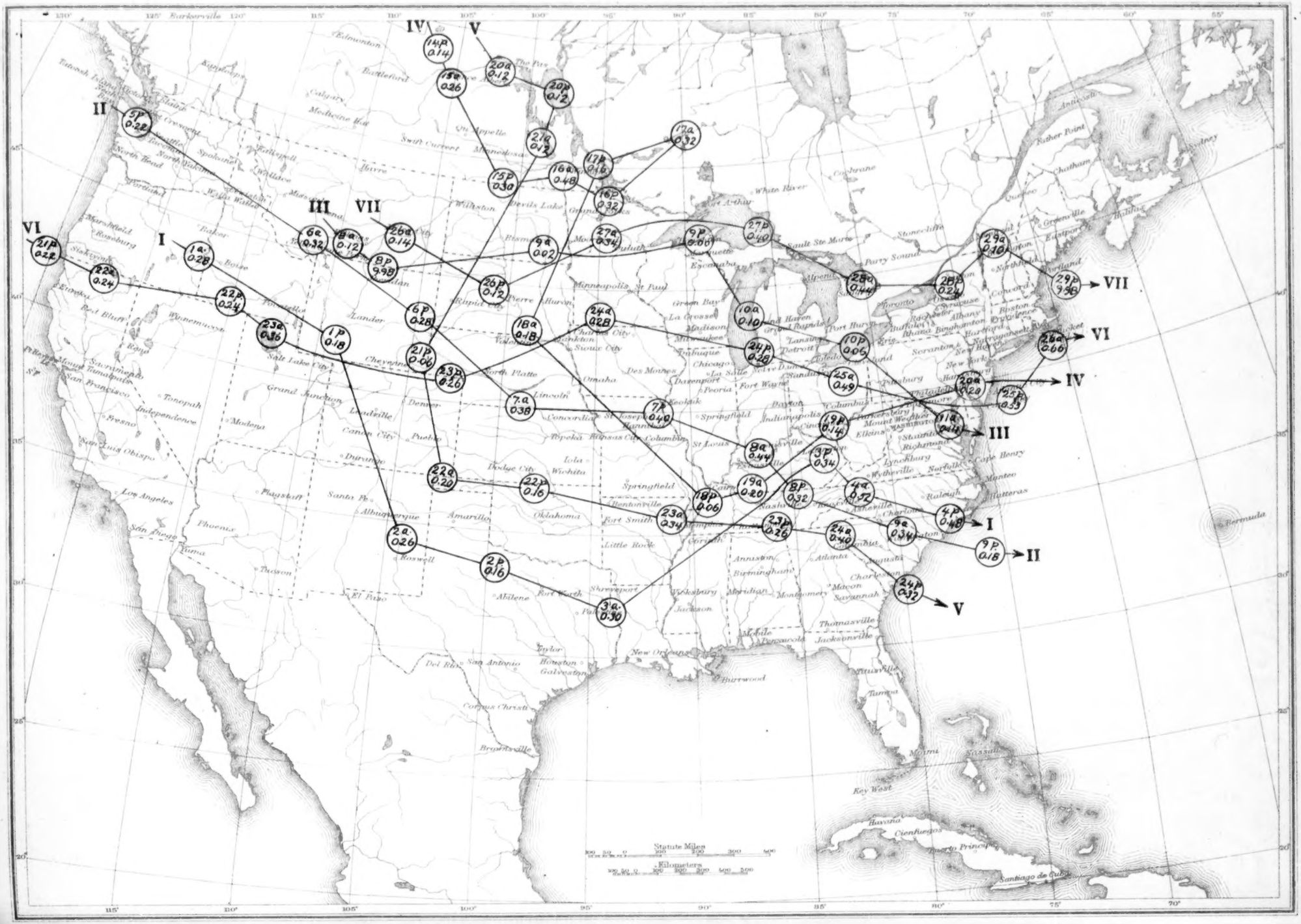


Chart III. Tracks of Centers of Low Areas, April, 1912.

Chart III. Tracks of Centers of Low Areas, April, 1912.

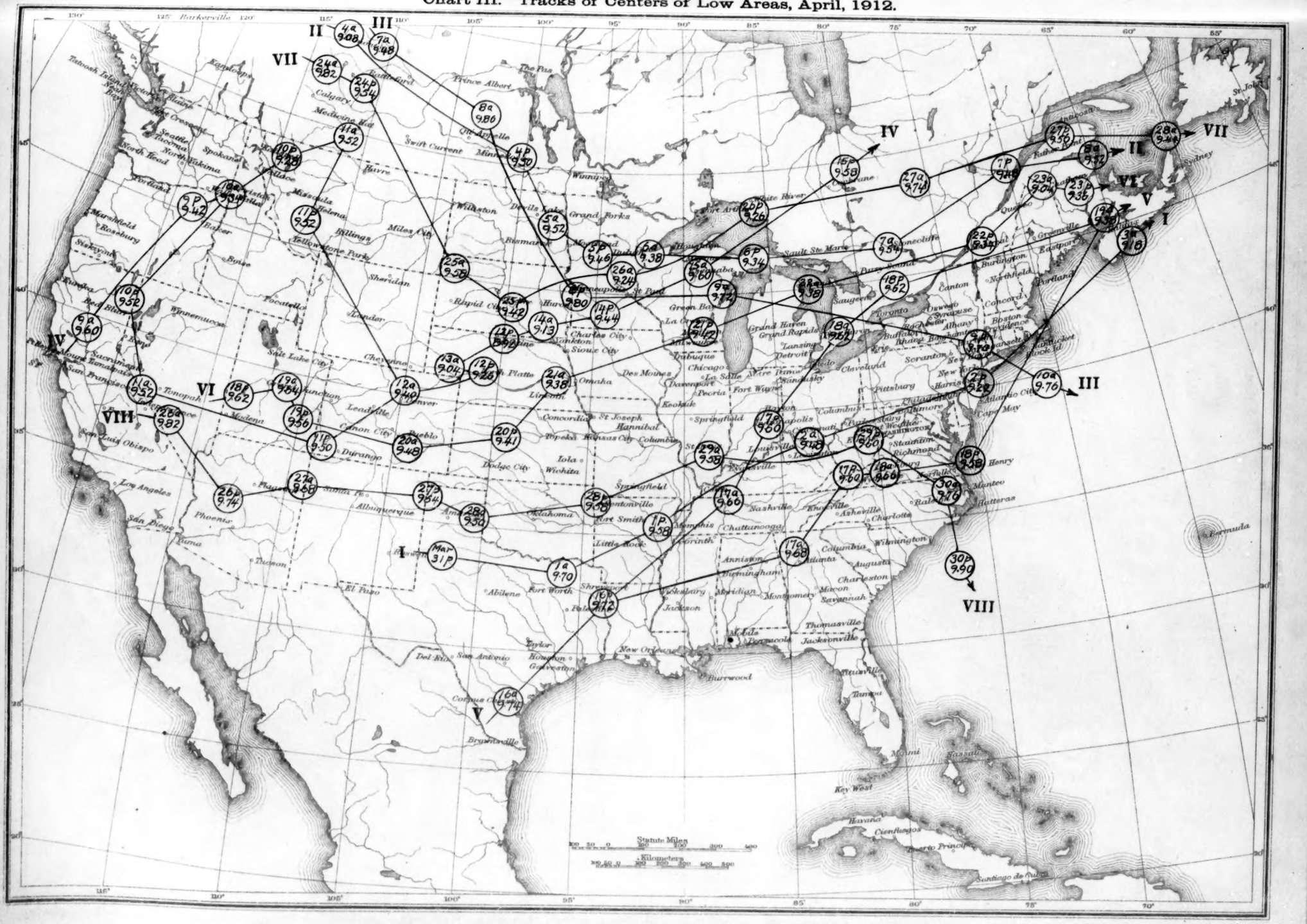


Chart IV. Departure of the Mean Temperature from the Normal, April, 1912.

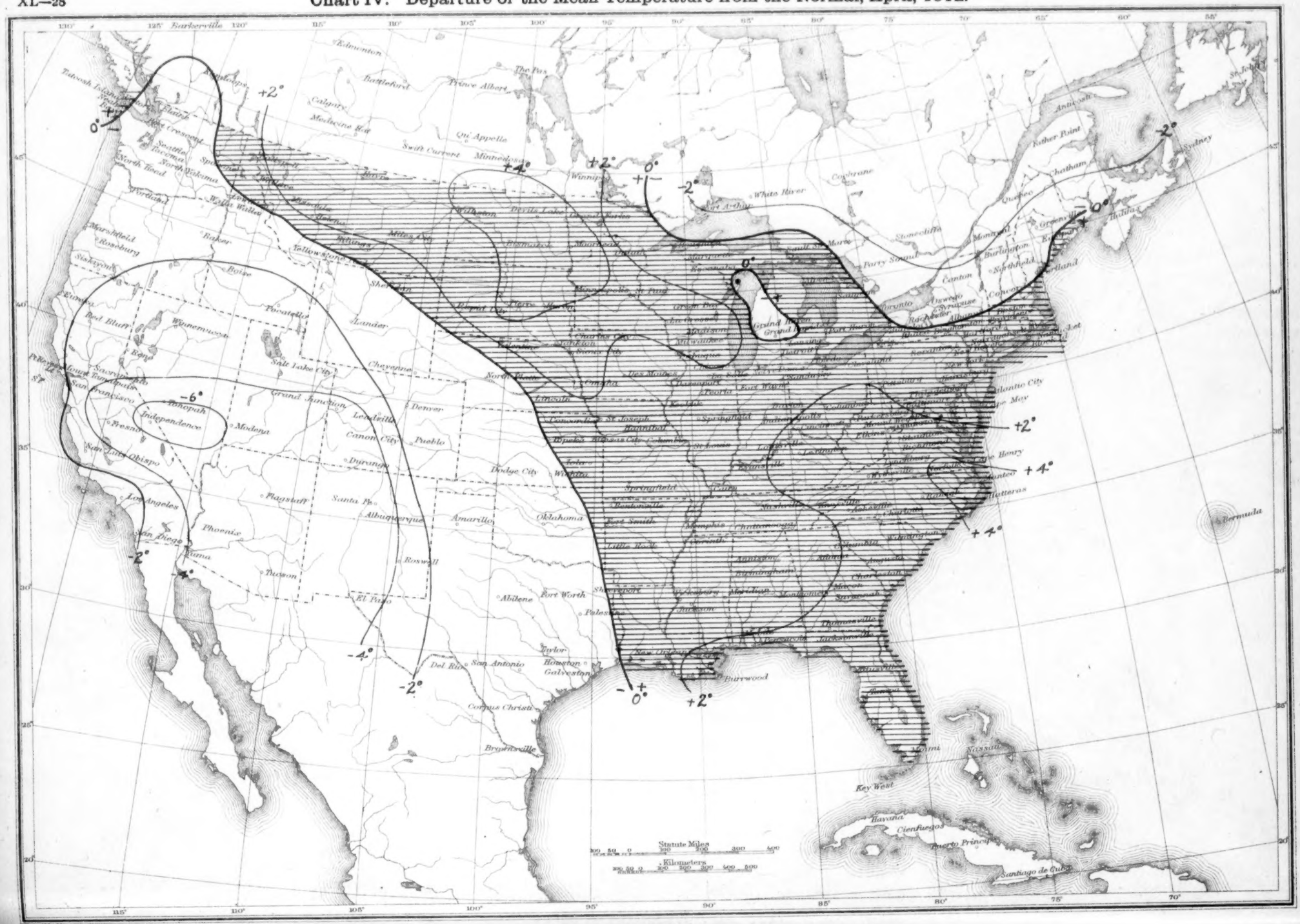


Chart V. Total Precipitation, April, 1912.

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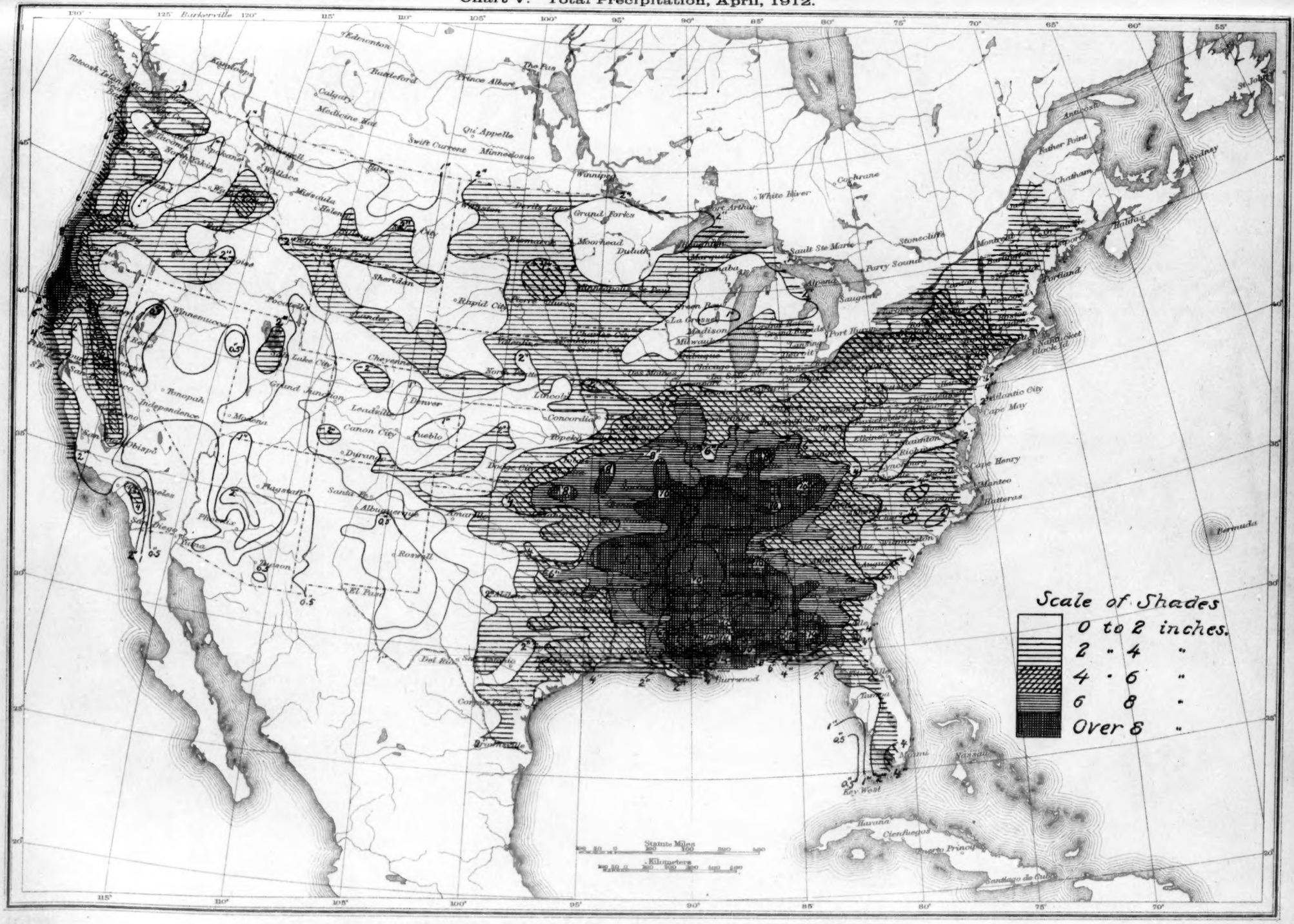

Chart VI. Percentage of Clear Sky between Sunrise and Sunset, April, 1912.

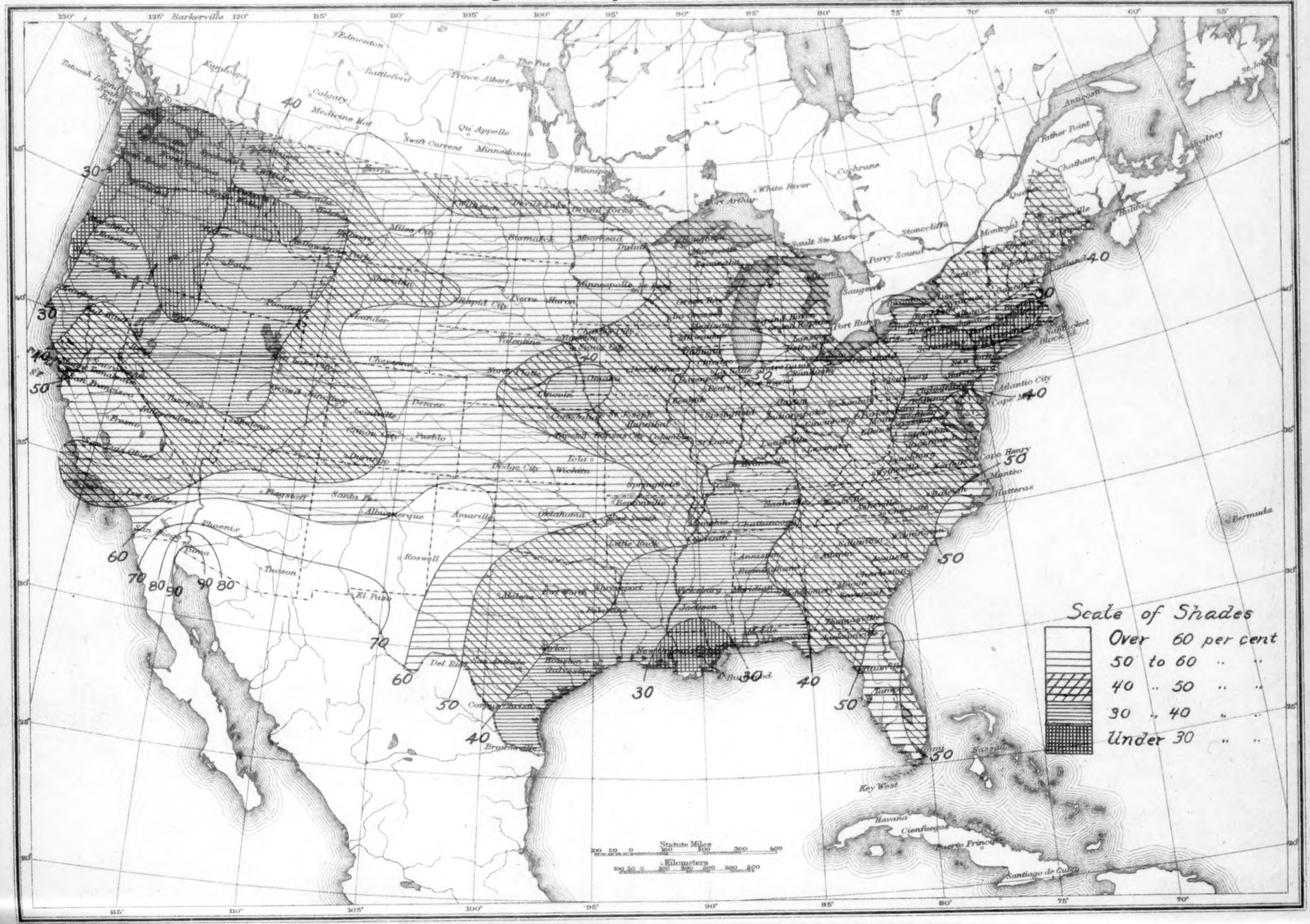

Chart VII. Isobars and Isotherms at Sea Level; Prevailing Winds, April, 1912.

Chart VII. Isobars and Isotherms at Sea Level; Prevailing Winds, April, 1912.

Chart VIII. Total Snowfall for April, 1912.